This listing of claims will replace all prior versions and listings of claims in the application.

#### Listing of Claims

#### 1. (Currently Amended) A compound of Formula I:

$$X^2$$
 $X^7$ 
 $X^7$ 
 $X^1$ 

in which:

 $X^1$  is -NHC( $R^1$ )( $R^2$ ) $X^3$  or -NH $X^4$ :

 $X^2$  is hydrogen, fluoro, -OH, -OR<sup>4</sup>, -NHR<sup>15</sup> or -NR<sup>17</sup>R<sup>18</sup> and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

 $X^3$  is cyano,  $-C(R^7)(R^8)R^{16}$ ,  $-C(R^6)(OR^6)_2$ ,  $-CH_2C(O)R^{16}$ ,  $-CH=CHS(O)_2R^5$ ,  $-C(O)CF_2C(O)NR^5R^5$ ,  $-C(O)C(O)NR^5R^6$ ,  $-C(O)C(O)OR^5$ ,  $-C(O)CH_2OR^5$ ,  $-C(O)CH_2N(R^6)SO_2R^5$  or  $-C(O)C(O)R^5$ ; wherein  $R^5$  is hydrogen,  $(C_{1-4})$ alkyl,  $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl,  $(C_{6-10})$ aryl $(C_{0-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{0-6})$ alkyl or hetero $(C_{8-10})$ bicycloaryl $(C_{0-6})$ alkyl;  $R^6$  is hydrogen, hydroxy or  $(C_{1-6})$ alkyl; or where  $X^3$  contains an  $-NR^5R^6$  group,  $R^5$  and  $R^6$  together with the nitrogen atom to which they are both attached, form hetero $(C_{3-10})$ cycloalkyl, hetero $(C_{5-10})$ aryl or hetero $(C_{8-10})$ bicycloaryl;  $R^7$  is hydrogen or  $(C_{1-4})$ alkyl and  $R^8$  is hydroxy or  $R^7$  and  $R^8$  together form oxo;  $R^{16}$  is hydrogen,  $-X^4$ ,  $-CF_3$ ,  $-CF_2CF_2R^9$  or  $-N(R^6)OR^6$ ;  $R^9$  is hydrogen, halo,  $(C_{1-4})$ alkyl,  $(C_{5-10})$ aryl $(C_{0-6})$ alkyl or  $(C_{5-10})$ heteroaryl $(C_{0-6})$ alkyl, with the proviso that when  $X^3$  is cyano, then  $X^2$  is hydrogen, fluoro, -OH,  $-OR^4$  or  $-NR^{17}R^{18}$  and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

 $X^4$  is comprises a heteromonocyclic ring containing 4 to 7 ring member atoms or a fused heterobicyclic ring system containing 8 to 14 ring member atoms and any carbocyclic ketone, iminoketone or thioketone derivative thereof, with the proviso that when  $-X^4$  is other than a heteromonocyclic ring containing 5 ring member atoms, wherein no more than two of the ring member atoms comprising the ring are heteroatoms, then  $X^2$  is fluoro, -OH, -OR<sup>4</sup>, -NHR<sup>15</sup> or -NR<sup>17</sup>R<sup>18</sup> and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

wherein within  $R^5$ ,  $X^3$  or  $X^4$  any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl,  $(C_{1-6})$ alkylidene, cyano, halo, halo-substituted $(C_{1-4})$ alkyl, nitro,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5C(O)R^{12}$ ,

 $R^1$  is hydrogen or  $(C_{1\text{-}6})$  alkyl and  $R^2$  is selected from a group consisting of hydrogen, cyano,  $-X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)NR^{12}, -X^5NR^{12}C(O)NR^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5OC(O)R^{12}, -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^5OC(O)R^{12}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}, -X^5P(O)(OR^{12})OR^{12}, -X^5OR^{14}, -X^5SR^{14}, -X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)_2R^{13}, -R^{14}, -X^5OR^{14}, -X^5SR^{14}, -X^5S(O)R^{14}, -X^5S(O)_2R^{14}, -X^5S(O)R^{14}, -X^5S(O)R^$ 

hetero( $C_{8-10}$ )bicycloaryl( $C_{1-6}$ )alkyl;

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substituted with 1 to 3 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano,
  halo, halo-substituted(C_{1-4})alkyl, nitro, -X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)OR^{12},
   -X^5NR^{12}C(O)NR^{12}R^{12}, -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12},
   -X^5C(O)R^{12}, -X^5OC(O)R^{12}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}.
  -X^5P(O)(OR^{12})OR^{12}, -X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)_2R^{13} and
 -X<sup>5</sup>C(O)R<sup>13</sup>, wherein X<sup>5</sup>, R<sup>12</sup> and R<sup>13</sup> are as defined above:
 R^3 is (C_{1-6})alkyl or -C(R^6)(R^6)X^6, wherein R^6 is hydrogen or (C_{1-6})alkyl and X^6 is selected from
 -X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)OR^{12}, -X^5NR^{12}C(O)NR^{12}R^{12}.
 -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^5OC(O)R^{12}.
 -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}, -X^5P(O)(OR^{12})OR^{12},
 -X^5OP(O)(OR^{12})OR^{12}, -X^5C(O)R^{13}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)R^{13}, -X^5OR^{14}, -
 -X^{5}SR^{14}, -X^{5}S(O)R^{14}, -X^{5}S(O)_{2}R^{14}, -X^{5}C(O)R^{14}, -X^{5}C(O)OR^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{14}R^{12}, -
 -X^5NR^{12}C(O)R^{14}, -X^5NR^{12}C(O)OR^{14}, -X^5C(O)NR^{14}R^{12}, -X^5S(O)_2NR^{14}R^{12}, -X^5NR^{12}S(O)_2R^{14},
 -X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup> wherein X<sup>5</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined
 above;
 R^4 is selected from -X^8NR^{12}R^{12}, -X^8NR^{12}C(O)R^{12}, -X^8NR^{12}C(O)OR^{12}, -X^8NR^{12}C(O)NR^{12}R^{12}
 -X^{8}NR^{12}C(NR^{12})NR^{12}R^{12}, -X^{8}OR^{12}, -X^{8}SR^{12}, -X^{5}C(O)OR^{12}, -X^{5}C(O)R^{12}, -X^{8}OC(O)R^{12}.
-X^{5}C(O)NR^{12}R^{12}, -X^{8}S(O)_{2}NR^{12}R^{12}, -X^{8}NR^{12}S(O)_{2}R^{12}, -X^{8}P(O)(OR^{12})OR^{12}.
-X^{8}OP(O)(OR^{12})OR^{12}, -X^{5}C(O)R^{13}, -X^{8}NR^{12}C(O)R^{13}, -X^{8}S(O)R^{13}, -X^{8}S(O)R^{13}, -R^{14}, -X^{8}OR^{14},
-X^8SR^{14}, -X^8S(O)R^{14}, -X^8S(O)_2R^{14}, -X^5C(O)R^{14}, -X^5C(O)OR^{14}, -X^8OC(O)R^{14}, -X^8NR^{14}R^{12}.
-X^8NR^{12}C(O)R^{14}, -X^8NR^{12}C(O)OR^{14}, -X^5C(O)NR^{14}R^{12}, -X^8S(O)_2NR^{14}R^{12}, -X^8NR^{12}S(O)_2R^{14}, -X^{12}R^{12}R^{12}, -X^{12}R^{12}R^{12}R^{12}, -X^{12}R^{12}R^{12}R^{12}R^{12}R^{12}, -X^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}R^{12}
-X^8NR^{12}C(O)NR^{14}R^{12} and -X^8NR^{12}C(NR^{12})NR^{14}R^{12} wherein X^8 is (C_{1-6})alkylene and X^5, R^{12},
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 $R^{15}$  is  $(C_{6-10})$ aryl, hetero $(C_{5-10})$ aryl,  $(C_{9-10})$ bicycloaryl or hetero $(C_{8-10})$ bicycloaryl;  $R^{17}$  is  $(C_{1-6})$ alkyl,  $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{0-3})$ alkyl,  $(C_{6-10})$ aryl $(C_{0-6})$ alkyl, hetero $(C_{5-10})$ aryl $(C_{0-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{0-6})$ alkyl or hetero $(C_{8-10})$ bicycloaryl $(C_{0-6})$ alkyl, with the proviso that when  $X^3$  is cyano, then  $R^{17}$  is

 $(C_{6-10})$ aryl $(C_{1-6})$ alkyl, hetero $(C_{5-10})$ aryl $(C_{1-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{1-6})$ alkyl or

 $R^{13}$  and  $R^{14}$  are as defined above, with the proviso that when  $X^3$  is cyano and  $X^2$  is  $-OR^4$ , where  $R^4$  is defined as  $-R^{14}$ , then  $R^{14}$  is  $(C_{3-10})$ cycloalkyl $(C_{1-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{1-3})$ alkyl,

 $(C_{1-6})alkyl, (C_{3-10})cycloalkyl(C_{1-6})alkyl, hetero(C_{3-10})cycloalkyl(C_{1-6})alkyl, (C_{6-10})aryl(C_{1-6})alkyl, hetero(C_{5-10})aryl(C_{1-6})alkyl, (C_{9-10})bicycloaryl(C_{1-6})alkyl or hetero(C_{8-10})bicycloaryl(C_{1-6})alkyl; \\ R^{18} is hydrogen, (C_{1-6})alkyl, (C_{3-10})cycloalkyl(C_{0-6})alkyl, hetero(C_{3-10})cycloalkyl(C_{0-6})alkyl, (C_{6-10})aryl(C_{0-6})alkyl, hetero(C_{5-10})aryl(C_{0-6})alkyl, (C_{9-10})bicycloaryl(C_{0-6})alkyl or hetero(C_{8-10})bicycloaryl(C_{0-6})alkyl, with the proviso that when <math>X^3$  is cyano, then  $R^{18}$  is  $(C_{1-6})alkyl, (C_{3-10})cycloalkyl(C_{1-6})alkyl, hetero(C_{3-10})cycloalkyl(C_{1-6})alkyl, (C_{6-10})aryl(C_{1-6})alkyl, hetero(C_{5-10})aryl(C_{1-6})alkyl, (C_{9-10})bicycloaryl(C_{1-6})alkyl, and <math>(C_{1-6})alkyl, (C_{1-6})alkyl, (C_{1-6})a$ 

wherein within R<sup>3</sup>, R<sup>4</sup>, R<sup>15</sup>, R<sup>17</sup> and R<sup>18</sup> any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano, halo, halo-substituted(C<sub>1-4</sub>)alkyl, nitro, -X<sup>5</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)R<sup>12</sup>,  $-X^5NR^{12}C(O)OR^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(NR^{12})NR^{12}R^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5SR^{12}$ .  $-X^5C(O)OR^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5OC(O)R^{12}$ ,  $-X^5C(O)NR^{12}R^{12}$ ,  $-X^5S(O)_2NR^{12}R^{12}$ .  $-X^5NR^{12}S(O)_2R^{12}$ ,  $-X^5P(O)(OR^{12})OR^{12}$ ,  $-X^5OP(O)(OR^{12})OR^{12}$ ,  $-X^5NR^{12}C(O)R^{13}$ ,  $-X^5S(O)R^{13}$ . -X<sup>5</sup>C(O)R<sup>13</sup> and -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup> and/or 1 radical selected from -R<sup>14</sup>, -X<sup>5</sup>OR<sup>14</sup>, -X<sup>5</sup>SR<sup>14</sup>,  $-X^{5}S(O)R^{14}$ ,  $-X^{5}S(O)_{2}R^{14}$ ,  $-X^{5}C(O)R^{14}$ ,  $-X^{5}C(O)OR^{14}$ ,  $-X^{5}OC(O)R^{14}$ ,  $-X^{5}NR^{14}R^{12}$ .  $-X^5NR^{12}C(O)R^{14}$ ,  $-X^5NR^{12}C(O)OR^{14}$ ,  $-X^5C(O)NR^{14}R^{12}$ ,  $-X^5S(O)_2NR^{14}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{14}$ , -X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup>; and within R<sup>3</sup> and R<sup>4</sup> any aliphatic mojety is unsubstituted or substituted further by 1 to 5 radicals independently selected from cyano, halo, nitro, -NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>12</sup>, -NR<sup>12</sup>C(O)OR<sup>12</sup>, -NR<sup>12</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>12</sup>R<sup>12</sup>.  $-OR^{12}$ ,  $-SR^{12}$ ,  $-C(O)OR^{12}$ ,  $-C(O)R^{12}$ ,  $-OC(O)R^{12}$ ,  $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-NR^{12}S(O)_2R^{12}$ , -P(O)(OR<sup>12</sup>)OR<sup>12</sup>, -OP(O)(OR<sup>12</sup>)OR<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>13</sup>, -S(O)R<sup>13</sup> and -S(O)<sub>2</sub>R<sup>13</sup>; wherein X<sup>5</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as described above, with the proviso that when X<sup>3</sup> is cyano and X<sup>2</sup> is -OR<sup>4</sup>, where R<sup>4</sup> is defined as -R<sup>14</sup>, or -NHR<sup>18</sup>, then any aromatic ring system present within R<sup>14</sup> or R<sup>18</sup> is not substituted further by halo,  $(C_{3-10})$  cycloalkyl, hetero  $(C_{3-10})$  cycloalkyl,  $(C_{6-10})$  aryl, hetero( $C_{5-10}$ )aryl, ( $C_{9-10}$ )bicycloaryl or hetero( $C_{8-10}$ )bicycloaryl; with the proviso that only one bicyclic ring structure is present within R<sup>3</sup>, R<sup>4</sup> or R<sup>15</sup>; N-oxide derivatives, prodrug derivatives. protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of

stereoisomers thereof and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

### 2. (Original) A compound of Claim 1, which is of the following formula:

$$X^2$$
 $X^1$ 

in which  $X^2$  is hydrogen, fluoro, -OH, -OR<sup>4</sup>, -NHR<sup>15</sup>;  $R^3$ ,  $R^4$ ,  $R^{15}$  and  $X^1$  are the same as defined in claim 1.

3. (Currently Amended) A compound of Claim 1 or Claim 2 in which:

 $X^{1}$  is -NHC( $R^{1}$ )( $R^{2}$ ) $X^{3}$  or -NHCH( $R^{19}$ )C(O) $R^{20}$ ;

 $X^2$  is hydrogen, fluoro, -OH, -OR<sup>4</sup>, -NHR<sup>15</sup> or -NR<sup>17</sup>R<sup>18</sup> and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

 $X^3$  is cyano,  $-C(R^7)(R^8)R^{16}$ ,  $-C(R^6)(OR^6)_2$ ,  $-CH_2C(O)R^{16}$ ,  $-CH=CHS(O)_2R^5$ ,  $-C(O)CF_2C(O)NR^5R^5$ ,  $-C(O)C(O)NR^5R^6$ ,  $-C(O)C(O)OR^5$ ,  $-C(O)CH_2OR^5$ ,  $-C(O)CH_2N(R^6)SO_2R^5$  or  $-C(O)C(O)R^5$ ; wherein  $R^5$  is hydrogen,  $(C_{1-4})$ alkyl,  $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl,  $(C_{6-10})$ aryl $(C_{0-6})$ alkyl, hetero $(C_{5-10})$ aryl $(C_{0-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{0-6})$ alkyl or hetero $(C_{8-10})$ bicycloaryl $(C_{0-6})$ alkyl;  $R^6$  is hydrogen, hydroxy or  $(C_{1-6})$ alkyl; or where  $X^3$  contains an  $-NR^5R^6$  group,  $R^5$  and  $R^6$  together with the nitrogen atom to which they are both attached, form hetero $(C_{3-10})$ cycloalkyl, hetero $(C_{5-10})$ aryl or hetero $(C_{8-10})$ bicycloaryl;  $R^7$  is hydrogen or  $(C_{1-4})$ alkyl and  $R^8$  is hydroxy or  $R^7$  and  $R^8$  together form oxo;  $R^{16}$  is hydrogen,  $-X^4$ ,  $-CF_3$ ,  $-CF_2CF_2R^9$  or  $-N(R^6)OR^6$ ;  $R^9$  is hydrogen, halo,  $(C_{1-4})$ alkyl,  $(C_{5-10})$ aryl $(C_{0-6})$ alkyl or  $(C_{5-10})$ heteroaryl $(C_{0-6})$ alkyl, with the proviso

that when  $X^3$  is cyano, then  $X^2$  is hydrogen, fluoro, -OH, -OR<sup>4</sup> or -NR<sup>17</sup>R<sup>18</sup> and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

 $X^4$  is comprises a heteromonocyclic ring containing 4 to 7 ring member atoms or a fused heterobicyclic ring system containing 8 to 14 ring member atoms and any carbocyclic ketone, iminoketone or thioketone derivative thereof, with the proviso that when  $-X^4$  is other than a heteromonocyclic ring containing 5 ring member atoms, wherein no more than two of the ring member atoms comprising the ring are heteroatoms, then  $X^2$  is fluoro, -OH, -OR<sup>4</sup>, -NHR<sup>15</sup> or -NR<sup>17</sup>R<sup>18</sup> and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

wherein within  $R^5$ ,  $X^3$  or  $X^4$  any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl,  $(C_{1-6})$ alkylidene, cyano, halo, halo-substituted $(C_{1-4})$ alkyl, nitro,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5NR^{12}C(O)OR^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5C(O)R^$ 

 $R^{1} \text{ is hydrogen or } (C_{1-6}) \text{alkyl and } R^{2} \text{ is selected from a group consisting of hydrogen, cyano,} \\ -X^{5}NR^{12}R^{12}, -X^{5}NR^{12}C(O)R^{12}, -X^{5}NR^{12}C(O)OR^{12}, -R^{12}, -X^{5}NR^{12}C(O)NR^{12}R^{12}, \\ -X^{5}NR^{12}C(NR^{12})NR^{12}R^{12}, -X^{5}OR^{12}, -X^{5}SR^{12}, -X^{5}C(O)OR^{12}, -X^{5}C(O)R^{12}, -X^{5}OC(O)R^{12}, \\ -X^{5}C(O)NR^{12}R^{12}, -X^{5}S(O)_{2}NR^{12}R^{12}, -X^{5}NR^{12}S(O)_{2}R^{12}, -X^{5}P(O)(OR^{12})OR^{12}, \\ -X^{5}OP(O)(OR^{12})OR^{12}, -X^{5}NR^{12}C(O)R^{13}, -X^{5}S(O)R^{13}, -X^{5}S(O)_{2}R^{13}, -R^{14}, -X^{5}OR^{14}, -X^{5}SR^{14}, \\ -X^{5}S(O)R^{14}, -X^{5}S(O)_{2}R^{14}, -X^{5}C(O)R^{14}, -X^{5}C(O)OR^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{12}R^{12}, \\ -X^{5}NR^{12}C(O)R^{14}, -X^{5}NR^{12}C(O)OR^{14}, -X^{5}C(O)NR^{12}R^{12}, -X^{5}S(O)_{2}NR^{14}R^{12}, -X^{5}NR^{12}S(O)_{2}R^{14}, \\ -X^{5}NR^{12}C(O)NR^{14}R^{12} \text{ and } -X^{5}NR^{12}C(NR^{12})NR^{14}R^{12}, \text{ wherein } X^{5}, R^{12}, R^{13} \text{ and } R^{14} \text{ are as defined} \\ -X^{5}NR^{12}C(O)NR^{14}R^{12} \text{ and } -X^{5}NR^{12}C(NR^{12})NR^{14}R^{12}, \text{ wherein } X^{5}, R^{12}, R^{13} \text{ and } R^{14} \text{ are as defined} \\ -X^{5}NR^{12}C(O)NR^{14}R^{12} \text{ and } -X^{5}NR^{12}C(NR^{12})NR^{14}R^{12}, \text{ wherein } X^{5}, R^{12}, R^{13} \text{ and } R^{14} \text{ are as defined} \\ -X^{5}NR^{12}C(O)R^{14}R^{12} \text{ and } -X^{5}NR^{12}C(NR^{12})NR^{14}R^{12}, \text{ wherein } X^{5}, R^{12}, R^{13} \text{ and } R^{14} \text{ are as defined} \\ -X^{5}NR^{12}C(O)R^{14}R^{12}R^{12} + X^{5}R^{12}R^{12}R^{12}R^{12} + X^{5}R^{12}R^{1$ 

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above; or R<sup>1</sup> and R<sup>2</sup> taken together with the carbon atom to which both R<sup>1</sup> and R<sup>2</sup> are attached
  form (C<sub>3-8</sub>)cycloalkylene or (C<sub>3-8</sub>)heterocycloalkylene; wherein within said R<sup>2</sup> any heteroaryl,
  aryl, cycloalkyl, heterocycloalkyl, cycloalkylene or heterocycloalkylene is unsubstituted or
  substituted with 1 to 3 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano,
 halo, halo-substituted(C_{1-4})alkyl, nitro, -X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)QR^{12},
 -X^5NR^{12}C(O)NR^{12}R^{12}, -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12},
 -X^5C(O)R^{12}, -X^5OC(O)R^{12}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}.
 -X^5P(O)(OR^{12})OR^{12}, -X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)_2R^{13} and
 -X<sup>5</sup>C(O)R<sup>13</sup>, wherein X<sup>5</sup>, R<sup>12</sup> and R<sup>13</sup> are as defined above;
R^3 is (C_{1-6})alkyl or -C(R^6)(R^6)X^6, wherein R^6 is hydrogen or (C_{1-6})alkyl and X^6 is selected from
 -X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)OR^{12}, -X^5NR^{12}C(O)NR^{12}R^{12}.
 -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^5OC(O)R^{12},
-X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}, -X^5P(O)(OR^{12})OR^{12}
-X^{5}OP(O)(OR^{12})OR^{12}, -X^{5}C(O)R^{13}, -X^{5}NR^{12}C(O)R^{13}, -X^{5}S(O)R^{13}, -X^{5}S(O)_{2}R^{13}, -R^{14}, -X^{5}OR^{14}, -X^
-X^{5}SR^{14}, -X^{5}S(O)R^{14}, -X^{5}S(O)_{2}R^{14}, -X^{5}C(O)R^{14}, -X^{5}C(O)OR^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{14}R^{12},
-X^5NR^{12}C(O)R^{14}, -X^5NR^{12}C(O)OR^{14}, -X^5C(O)NR^{14}R^{12}, -X^5S(O)_2NR^{14}R^{12}, -X^5NR^{12}S(O)_2R^{14}, -X^5NR^{12}S(O)_2R^{14},
-X^5NR^{12}C(O)NR^{14}R^{12} and -X^5NR^{12}C(NR^{12})NR^{14}R^{12} wherein X^5, R^{12}, R^{13} and R^{14} are as defined
above;
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 $R^4 \text{ is selected from } -X^8NR^{12}R^{12}, -X^8NR^{12}C(O)R^{12}, -X^8NR^{12}C(O)OR^{12}, -X^8NR^{12}C(O)NR^{12}R^{12}, \\ -X^8NR^{12}C(NR^{12})NR^{12}R^{12}, -X^8OR^{12}, -X^8SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^8OC(O)R^{12}, \\ -X^5C(O)NR^{12}R^{12}, -X^8S(O)_2NR^{12}R^{12}, -X^8NR^{12}S(O)_2R^{12}, -X^8P(O)(OR^{12})OR^{12}, \\ -X^8OP(O)(OR^{12})OR^{12}, -X^5C(O)R^{13}, -X^8NR^{12}C(O)R^{13}, -X^8S(O)R^{13}, -X^8S(O)_2R^{13}, -R^{14}, -X^8OR^{14}, \\ -X^8SR^{14}, -X^8S(O)R^{14}, -X^8S(O)_2R^{14}, -X^5C(O)R^{14}, -X^5C(O)OR^{14}, -X^8OC(O)R^{14}, -X^8NR^{12}R^{12}, \\ -X^8NR^{12}C(O)R^{14}, -X^8NR^{12}C(O)OR^{14}, -X^5C(O)NR^{14}R^{12}, -X^8S(O)_2NR^{14}R^{12}, -X^8NR^{12}S(O)_2R^{14}, \\ -X^8NR^{12}C(O)NR^{14}R^{12} \text{ and } -X^8NR^{12}C(NR^{12})NR^{14}R^{12} \text{ wherein } X^8 \text{ is } (C_{1-6})\text{alkylene and } X^5, R^{12}, \\ R^{13} \text{ and } R^{14} \text{ are as defined above, with the proviso that when } X^3 \text{ is cyano and } X^2 \text{ is } -OR^4, \text{ where } R^4 \text{ is defined as } -R^{14}, \text{ then } R^{14} \text{ is } (C_{3-10})\text{cycloalkyl}(C_{1-6})\text{alkyl}, \text{ hetero}(C_{3-10})\text{cycloalkyl}(C_{1-6})\text{alkyl}, \\ (C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}, \text{ hetero}(C_{5-10})\text{aryl}(C_{1-6})\text{alkyl}, (C_{9-10})\text{bicycloaryl}(C_{1-6})\text{alkyl} \text{ or } \\ \text{hetero}(C_{8-10})\text{bicycloaryl}(C_{1-6})\text{alkyl};$ 

 $R^{15}$  is  $(C_{6-10})$  aryl, hetero $(C_{5-10})$  aryl,  $(C_{9-10})$  bicycloaryl or hetero $(C_{8-10})$  bicycloaryl;

 $R^{17} \text{ is } (C_{1\text{-}6}) \text{alkyl, } (C_{3\text{-}10}) \text{cycloalkyl} (C_{0\text{-}6}) \text{alkyl, hetero} (C_{3\text{-}10}) \text{cycloalkyl} (C_{0\text{-}3}) \text{alkyl, } (C_{6\text{-}10}) \text{aryl} (C_{0\text{-}6}) \text{alkyl, hetero} (C_{5\text{-}10}) \text{aryl} (C_{0\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{0\text{-}6}) \text{alkyl or hetero} (C_{8\text{-}10}) \text{bicycloaryl} (C_{0\text{-}6}) \text{alkyl, with the proviso that when } X^3 \text{ is cyano, then } R^{17} \text{ is } (C_{1\text{-}6}) \text{alkyl, } (C_{3\text{-}10}) \text{cycloalkyl} (C_{1\text{-}6}) \text{alkyl, } (C_{6\text{-}10}) \text{aryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{1\text{-}6}) \text{alkyl, } (C_{6\text{-}10}) \text{aryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{1\text{-}6}) \text{alkyl, hetero} (C_{8\text{-}10}) \text{bicycloaryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{0\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{aryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{aryl} (C_{1\text{-}6}) \text{alkyl, } (C_{9\text{-}10}) \text{bicycloaryl} (C_{1\text{-}6}) \text{alkyl, } (C_{1\text{-}6}) \text{alkyl, } (C$ 

R<sup>19</sup> and R<sup>20</sup> together with the atoms to which R<sup>19</sup> and R<sup>20</sup> are attached form (C<sub>4-8</sub>)heterocycloalkylene, wherein no more than one of the ring member atoms comprising the ring is a heteroatom selected from -NR<sup>21</sup>- or -O-, wherein the ring is unsubstituted or substituted with  $R^2$ , wherein  $R^2$  is as defined above, and  $R^{21}$  is hydrogen,  $-C(O)OR^{12}$ ,  $-C(O)R^{12}$ .  $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-S(O)R^{13}$  and  $-S(O)_2R^{13}$ ,  $-S(O)R^{14}$ ,  $-S(O)_2R^{14}$ ,  $-C(O)R^{14}$ ,  $-C(O)OR^{14}$ ,  $-C(O)NR^{12}R^{12}$  and  $-S(O)_2NR^{14}R^{12}$ , wherein  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  are as defined above; wherein within R<sup>3</sup>, R<sup>4</sup>, R<sup>15</sup>, R<sup>17</sup> and R<sup>18</sup> any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl,  $(C_{1-6})$ alkylidene, cyano, halo, halo-substituted(C<sub>1-4</sub>)alkyl, nitro, -X<sup>5</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)R<sup>12</sup>,  $-X^{5}NR^{12}C(O)OR^{12}$ ,  $-X^{5}NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^{5}NR^{12}C(NR^{12})NR^{12}R^{12}$ ,  $-X^{5}OR^{12}$ ,  $-X^{5}SR^{12}$ .  $-X^5C(O)OR^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5OC(O)R^{12}$ ,  $-X^5C(O)NR^{12}R^{12}$ ,  $-X^5S(O)_2NR^{12}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{12}$ ,  $-X^5P(O)(OR^{12})OR^{12}$ ,  $-X^5OP(O)(OR^{12})OR^{12}$ ,  $-X^5NR^{12}C(O)R^{13}$ ,  $-X^5S(O)R^{13}$ ,  $-X^5C(O)R^{13}$  and  $-X^5S(O)_2R^{13}$  and/or 1 radical selected from  $-R^{14}$ ,  $-X^5OR^{14}$ ,  $-X^5SR^{14}$ .  $-X^{5}S(O)R^{14}$ ,  $-X^{5}S(O)_{2}R^{14}$ ,  $-X^{5}C(O)R^{14}$ ,  $-X^{5}C(O)OR^{14}$ ,  $-X^{5}OC(O)R^{14}$ ,  $-X^{5}NR^{14}R^{12}$ ,  $-X^5NR^{12}C(O)R^{14}$ ,  $-X^5NR^{12}C(O)OR^{14}$ ,  $-X^5C(O)NR^{14}R^{12}$ ,  $-X^5S(O)_2NR^{14}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{14}$ . -X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup>; and within R<sup>3</sup> and R<sup>4</sup> any aliphatic moiety is unsubstituted or substituted further by 1 to 5 radicals independently selected from cyano, halo, nitro, -NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>12</sup>, -NR<sup>12</sup>C(O)OR<sup>12</sup>, -NR<sup>12</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>12</sup>R<sup>12</sup>,  $-OR^{12}$ ,  $-SR^{12}$ ,  $-C(O)OR^{12}$ ,  $-C(O)R^{12}$ ,  $-OC(O)R^{12}$ ,  $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-NR^{12}S(O)_2R^{12}$ ,

-P(O)(OR<sup>12</sup>)OR<sup>12</sup>, -OP(O)(OR<sup>12</sup>)OR<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>13</sup>, -S(O)R<sup>13</sup> and -S(O)<sub>2</sub>R<sup>13</sup>; wherein X<sup>5</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as described above, with the proviso that when X<sup>3</sup> is cyano and X<sup>2</sup> is -OR<sup>4</sup>, where R<sup>4</sup> is defined as -R<sup>14</sup>, or -NHR<sup>18</sup>, then any aromatic ring system present within R<sup>14</sup> or R<sup>18</sup> is not substituted further by halo, (C<sub>3-10</sub>)cycloalkyl, hetero(C<sub>3-10</sub>)cycloalkyl, (C<sub>6-10</sub>)aryl, hetero(C<sub>5-10</sub>)aryl, (C<sub>9-10</sub>)bicycloaryl or hetero(C<sub>8-10</sub>)bicycloaryl; with the proviso that only one bicyclic ring structure is present within R<sup>3</sup>, R<sup>4</sup> or R<sup>15</sup>; N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of stereoisomers thereof and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

# 4. (Currently Amended) The compound of Claim 1 or Claim 2 in which:

 $X^1$  is  $-NHC(R^1)(R^2)X^3$  or  $-NHCH(R^{19})C(O)R^{20}$ ;

 $X^2$  is hydrogen, fluoro, -OH, -OR<sup>4</sup>, -NHR<sup>15</sup> or -NR<sup>17</sup>R<sup>18</sup> and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

 $X^3$  is  $-C(R^7)(R^8)R^{16}$ ,  $-C(R^6)(OR^6)_2$ ,  $-CH_2C(O)R^{16}$ ,  $-CH=CHS(O)_2R^5$ ,  $-C(O)CF_2C(O)NR^5R^5$ ,  $-C(O)C(O)NR^5R^6$ ,  $-C(O)C(O)OR^5$ ,  $-C(O)CH_2OR^5$ ,  $-C(O)CH_2N(R^6)SO_2R^5$  or  $-C(O)C(O)R^5$ ; wherein  $R^5$  is hydrogen,  $(C_{1-4})$ alkyl,  $(C_{3-10})$ cycloalkyl,  $(C_{0-6})$ alkyl, hetero( $C_{3-10}$ )cycloalkyl( $C_{0-3}$ )alkyl,  $(C_{6-10})$ aryl( $C_{0-6}$ )alkyl, hetero( $C_{5-10}$ )aryl( $C_{0-6}$ )alkyl,  $(C_{9-10})$ bicycloaryl( $C_{0-6}$ )alkyl or hetero( $C_{8-10}$ )bicycloaryl( $C_{0-6}$ )alkyl;  $R^6$  is hydrogen, hydroxy or  $(C_{1-6})$ alkyl; or where  $X^3$  contains an  $-NR^5R^6$  group,  $R^5$  and  $R^6$  together with the nitrogen atom to which they are both attached, form hetero( $C_{3-10}$ )cycloalkyl, hetero( $C_{5-10}$ )aryl or hetero( $C_{8-10}$ )bicycloaryl;  $R^7$  is hydrogen or  $(C_{1-4})$ alkyl and  $R^8$  is hydroxy or  $R^7$  and  $R^8$  together form oxo;  $R^{16}$  is hydrogen,  $-X^4$ ,  $-CF_3$ ,  $-CF_2CF_2R^9$  or  $-N(R^6)OR^6$ ;  $R^9$  is hydrogen, halo,  $(C_{1-4})$ alkyl,  $(C_{5-10})$ aryl( $C_{0-6}$ )alkyl or  $(C_{5-10})$ heteroaryl( $C_{0-6}$ )alkyl;

 $X^4$  is comprises a heteromonocyclic ring containing 4 to 7 ring member atoms or a fused heterobicyclic ring system containing 8 to 14 ring member atoms and any carbocyclic ketone, iminoketone or thioketone derivative thereof, with the proviso that when  $-X^4$  is other than a

heteromonocyclic ring containing 5 ring member atoms, wherein no more than two of the ring member atoms comprising the ring are heteroatoms, then  $X^2$  is fluoro, -OH, -OR<sup>4</sup>, -NHR<sup>15</sup> or -NR<sup>17</sup>R<sup>18</sup> and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

wherein within  $R^5$ ,  $X^3$  or  $X^4$  any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl,  $(C_{1-6})$ alkylidene, cyano, halo, halo-substituted $(C_{1-4})$ alkyl, nitro,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5C(O)R^{12}$ ,

 $R^1$  is hydrogen or  $(C_{1-6})$ alkyl and  $R^2$  is selected from a group consisting of hydrogen, cyano,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5OC(O)R^{12}$ ,  $-X^5OC(O)R^$ 

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-X^5C(O)R^{12}, -X^5OC(O)R^{12}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}, -X^5P(O)(OR^{12})OR^{12}, -X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)R^{13} and
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-X<sup>5</sup>C(O)R<sup>13</sup>, wherein X<sup>5</sup>, R<sup>12</sup> and R<sup>13</sup> are as defined above;

 $R^3$  is  $(C_{1-6})$ alkyl or  $-C(R^6)(R^6)X^6$ , wherein  $R^6$  is hydrogen or  $(C_{1-6})$ alkyl and  $X^6$  is selected from  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,

 $-X^5NR^{12}C(NR^{12})NR^{12}R^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5SR^{12}$ ,  $-X^5C(O)OR^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5OC(O)R^{12}$ ,

 $-X^5C(O)NR^{12}R^{12}$ ,  $-X^5S(O)_2NR^{12}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{12}$ ,  $-X^5P(O)(OR^{12})OR^{12}$ ,

 $-X^5OP(O)(OR^{12})OR^{12}, -X^5C(O)R^{13}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)_2R^{13}, -R^{14}, -X^5OR^{14}, -R^{14}, -R^{1$ 

 $-X^{5}SR^{14}$ ,  $-X^{5}S(O)R^{14}$ ,  $-X^{5}S(O)_{2}R^{14}$ ,  $-X^{5}C(O)R^{14}$ ,  $-X^{5}C(O)OR^{14}$ ,  $-X^{5}OC(O)R^{14}$ ,  $-X^{5}NR^{14}R^{12}$ ,

 $-X^5NR^{12}C(O)R^{14}, -X^5NR^{12}C(O)OR^{14}, -X^5C(O)NR^{14}R^{12}, -X^5S(O)_2NR^{14}R^{12}, -X^5NR^{12}S(O)_2R^{14}, -X^5NR^{12}S(O)_2R^{14},$ 

 $-X^5NR^{12}C(O)NR^{14}R^{12}$  and  $-X^5NR^{12}C(NR^{12})NR^{14}R^{12}$  wherein  $X^5$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  are as defined above;

 $R^4$  is selected from  $-X^8NR^{12}R^{12}$ ,  $-X^8NR^{12}C(O)R^{12}$ ,  $-X^8NR^{12}C(O)OR^{12}$ ,  $-X^8NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^8NR^{12}C(O)R^{12}$ ,  $-X^8NR^{12}C(O)R^{12}$ ,  $-X^8C(O)R^{12}$ ,  $-X^8C(O)R^{12$ 

 $-X^{5}C(O)NR^{12}R^{12}$ ,  $-X^{8}S(O)_{2}NR^{12}R^{12}$ ,  $-X^{8}NR^{12}S(O)_{2}R^{12}$ ,  $-X^{8}P(O)(OR^{12})OR^{12}$ ,

 $-X^{8}OP(O)(OR^{12})OR^{12}$ ,  $-X^{5}C(O)R^{13}$ ,  $-X^{8}NR^{12}C(O)R^{13}$ ,  $-X^{8}S(O)R^{13}$ ,  $-X^{8}S(O)_{2}R^{13}$ ,  $-R^{14}$ ,  $-X^{8}OR^{14}$ ,

 $-X^{8}SR^{14}$ ,  $-X^{8}S(O)R^{14}$ ,  $-X^{8}S(O)_{2}R^{14}$ ,  $-X^{5}C(O)R^{14}$ ,  $-X^{5}C(O)OR^{14}$ ,  $-X^{8}OC(O)R^{14}$ ,  $-X^{8}NR^{14}R^{12}$ ,

 $-X^{8}NR^{12}C(O)R^{14}$ ,  $-X^{8}NR^{12}C(O)OR^{14}$ ,  $-X^{5}C(O)NR^{14}R^{12}$ ,  $-X^{8}S(O)_{2}NR^{14}R^{12}$ ,  $-X^{8}NR^{12}S(O)_{2}R^{14}$ ,

 $-X^8NR^{12}C(O)NR^{14}R^{12}$  and  $-X^8NR^{12}C(NR^{12})NR^{14}R^{12}$  wherein  $X^8$  is  $(C_{1-6})$ alkylene and  $X^5$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  are as defined above;

 $R^{15}$  is  $(C_{6-10})$ aryl, hetero $(C_{5-10})$ aryl,  $(C_{9-10})$ bicycloaryl or hetero $(C_{8-10})$ bicycloaryl;

 $R^{17}$  is hydrogen,  $(C_{1-6})$ alkyl,  $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl,  $(C_{6-10})$ aryl $(C_{0-6})$ alkyl, hetero $(C_{5-10})$ aryl $(C_{0-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{0-6})$ alkyl; hetero $(C_{8-10})$ bicycloaryl $(C_{0-6})$ alkyl;

 $R^{18}$  is  $(C_{1-6})$ alkyl,  $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{0-6})$ alkyl,  $(C_{6-10})$ aryl $(C_{0-6})$ alkyl, hetero $(C_{5-10})$ aryl $(C_{0-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{0-6})$ alkyl or hetero $(C_{8-10})$ bicycloaryl $(C_{0-6})$ alkyl; and

 $R^{19}$  and  $R^{20}$  together with the atoms to which  $R^{19}$  and  $R^{20}$  are attached form  $(C_{4-8})$ heterocycloalkylene, wherein no more than one of the ring member atoms comprising the

ring is a heteroatom selected from -NR<sup>21</sup>- or -O-, wherein the ring is unsubstituted or substituted with R<sup>2</sup>, wherein R<sup>2</sup> is as defined above, and R<sup>21</sup> is hydrogen, -C(O)OR<sup>12</sup>, -C(O)R<sup>12</sup>,  $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-S(O)R^{13}$  and  $-S(O)_2R^{13}$ ,  $-S(O)R^{14}$ ,  $-S(O)_2R^{14}$ ,  $-C(O)R^{14}$ , -C(O)OR<sup>14</sup>, -C(O)NR<sup>12</sup>R<sup>12</sup> and -S(O)<sub>2</sub>NR<sup>14</sup>R<sup>12</sup>, wherein R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined above; wherein within R<sup>3</sup>, R<sup>4</sup>, R<sup>15</sup>, R<sup>17</sup> and R<sup>18</sup> any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano, halo, halo-substituted(C<sub>1-4</sub>)alkyl, nitro, -X<sup>5</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)R<sup>12</sup>,  $-X^5NR^{12}C(O)OR^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(NR^{12})NR^{12}R^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5SR^{12}$  $-X^5C(O)OR^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5OC(O)R^{12}$ ,  $-X^5C(O)NR^{12}R^{12}$ ,  $-X^5S(O)_2NR^{12}R^{12}$ .  $-X^5NR^{12}S(O)_2R^{12}$ ,  $-X^5P(O)(OR^{12})OR^{12}$ ,  $-X^5OP(O)(OR^{12})OR^{12}$ ,  $-X^5NR^{12}C(O)R^{13}$ ,  $-X^5S(O)R^{13}$ . -X<sup>5</sup>C(O)R<sup>13</sup> and -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup> and/or 1 radical selected from -R<sup>14</sup>, -X<sup>5</sup>OR<sup>14</sup>, -X<sup>5</sup>SR<sup>14</sup>,  $-X^{5}S(O)R^{14}$ ,  $-X^{5}S(O)_{2}R^{14}$ ,  $-X^{5}C(O)R^{14}$ ,  $-X^{5}C(O)OR^{14}$ ,  $-X^{5}OC(O)R^{14}$ ,  $-X^{5}NR^{14}R^{12}$ .  $-X^5NR^{12}C(O)R^{14}$ ,  $-X^5NR^{12}C(O)OR^{14}$ ,  $-X^5C(O)NR^{14}R^{12}$ ,  $-X^5S(O)_2NR^{14}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{14}$ , -X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup>; and within R<sup>3</sup> and R<sup>4</sup> any aliphatic moiety is unsubstituted or substituted further by 1 to 5 radicals independently selected from cyano, halo, nitro, -NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>12</sup>, -NR<sup>12</sup>C(O)OR<sup>12</sup>, -NR<sup>12</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>12</sup>R<sup>12</sup>.  $-OR^{12}, -SR^{12}, -C(O)OR^{12}, -C(O)R^{12}, -OC(O)R^{12}, -C(O)NR^{12}R^{12}, -S(O)_2NR^{12}R^{12}, -NR^{12}S(O)_2R^{12}, -NR^{$ -P(O)(OR<sup>12</sup>)OR<sup>12</sup>, -OP(O)(OR<sup>12</sup>)OR<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>13</sup>, -S(O)R<sup>13</sup> and -S(O)<sub>2</sub>R<sup>13</sup>; wherein X<sup>5</sup>, R<sup>12</sup>,  $R^{13}$  and  $R^{14}$  are as described above; with the proviso that only one bicyclic ring structure is present within R<sup>3</sup>, R<sup>4</sup> or R<sup>15</sup>; N-oxide derivatives, prodrug derivatives, protected derivatives. individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof.and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

5. (Withdrawn-currently Amended) A compound of Claim 1 or Claim 2 in which:  $X^1$  is -NHC( $R^1$ )( $R^2$ ) $X^3$  or -NHCH( $R^{19}$ )C(O) $R^{20}$ ;  $X^2$  is hydrogen, fluoro, -OH, -OR $^4$  or -NR $^{17}$ R $^{18}$  and  $X^7$  is hydrogen or  $X^2$  and  $X^7$  both represent fluoro;

## X<sup>3</sup> is cyano;

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wherein within X<sup>3</sup> any alicyclic or aromatic ring system is unsubstituted or substituted further by
  1 to 5 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano, halo,
 halo-substituted(C_{1-4})alkyl, nitro, -X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)OR^{12}
  -X^5NR^{12}C(O)NR^{12}R^{12}, -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}.
 -X^5C(O)R^{12}, -X^5OC(O)R^{12}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}.
 -X^5P(O)(OR^{12})OR^{12}, -X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13} and -X^5S(O)_2R^{13}
 and/or 1 radical selected from -R^{14}, -X^5OR^{14}, -X^5SR^{14}, -X^5S(O)R^{14}, -X^5S(O)R^{14}, -X^5C(O)R^{14}
 -X^{5}C(O)OR^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{14}R^{12}, -X^{5}NR^{12}C(O)R^{14}, -X^{5}NR^{12}C(O)OR^{14}.
 -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{14}R^{12}, -X^5NR^{12}S(O)_2R^{14}, -X^5NR^{12}C(O)NR^{14}R^{12} and
 -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup>, wherein X<sup>5</sup> is a bond or (C<sub>1-6</sub>)alkylene; R<sup>12</sup> at each occurrence
 independently is hydrogen, (C_{1-6})alkyl or halo-substituted (C_{1-6})alkyl; R^{13} is (C_{1-6})alkyl or
 halo-substituted(C_{1-6})alkyl; and R^{14} is (C_{3-10})cycloalkyl(C_{0-6})alkyl,
 hetero(C_{3-10})cycloalkyl(C_{0-3})alkyl, (C_{6-10})aryl(C_{0-6})alkyl, hetero(C_{5-10})aryl(C_{0-6})alkyl,
 (C_{9-10})bicycloaryl(C_{0-6})alkyl or hetero(C_{8-10})bicycloaryl(C_{0-6})alkyl;
R<sup>1</sup> is hydrogen or (C<sub>1-6</sub>)alkyl and R<sup>2</sup> is selected from a group consisting of hydrogen, cyano,
-X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)OR^{12}, -R^{12}, -X^5NR^{12}C(O)NR^{12}R^{12},
-X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^5OC(O)R^{12}
-X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}, -X^5P(O)(OR^{12})OR^{12}.
-X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)_2R^{13}, -R^{14}, -X^5OR^{14}, -X^5SR^{14}
-X^{5}S(O)R^{14}, -X^{5}S(O)_{2}R^{14}, -X^{5}C(O)R^{14}, -X^{5}C(O)OR^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{14}R^{12}
-X^5NR^{12}C(O)R^{14}, -X^5NR^{12}C(O)OR^{14}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{14}R^{12}, -X^5NR^{12}S(O)_2R^{14}, -X^5NR^{14}S(O)_2R^{14}, -X^5NR^{14}S(O)_2R^{14},
-X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup>, wherein X<sup>5</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined
above; or R<sup>1</sup> and R<sup>2</sup> taken together with the carbon atom to which both R<sup>1</sup> and R<sup>2</sup> are attached
form (C_{3-8}) cycloalkylene or (C_{3-8}) heterocycloalkylene; wherein within said \mathbb{R}^2 any heteroaryl,
aryl, cycloalkyl, heterocycloalkyl, cycloalkylene or heterocycloalkylene is unsubstituted or
substituted with 1 to 3 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano,
halo, halo-substituted(C<sub>1-4</sub>)alkyl, nitro, -X<sup>5</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)OR<sup>12</sup>.
-X^5NR^{12}C(O)NR^{12}R^{12}, -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12},
-X^5C(O)R^{12}, -X^5OC(O)R^{12}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)NR^{12}R^{12}, -X^5NR^{12}S(O)R^{12}
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-X^5P(O)(OR^{12})OR^{12}, -X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)_2R^{13} and -X^5C(O)R^{13}, wherein X^5, R^{12} and R^{13} are as defined above;
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 $R^{3} \text{ is } (C_{1-6}) \text{alkyl or } -C(R^{6})(R^{6})X^{6}, \text{ wherein } R^{6} \text{ is hydrogen or } (C_{1-6}) \text{alkyl and } X^{6} \text{ is selected from } -X^{5}NR^{12}R^{12}, -X^{5}NR^{12}C(O)R^{12}, -X^{5}NR^{12}C(O)R^{12}, -X^{5}NR^{12}C(O)NR^{12}R^{12}, \\ -X^{5}NR^{12}C(NR^{12})NR^{12}R^{12}, -X^{5}OR^{12}, -X^{5}SR^{12}, -X^{5}C(O)QR^{12}, -X^{5}C(O)R^{12}, -X^{5}OC(O)R^{12}, \\ -X^{5}C(O)NR^{12}R^{12}, -X^{5}S(O)_{2}NR^{12}R^{12}, -X^{5}NR^{12}S(O)_{2}R^{12}, -X^{5}P(O)(OR^{12})QR^{12}, \\ -X^{5}OP(O)(OR^{12})QR^{12}, -X^{5}C(O)R^{13}, -X^{5}NR^{12}C(O)R^{13}, -X^{5}S(O)_{2}R^{13}, -X^{5}S(O)_{2}R^{14}, -X^{5}OR^{14}, \\ -X^{5}SR^{14}, -X^{5}S(O)R^{14}, -X^{5}S(O)_{2}R^{14}, -X^{5}C(O)R^{14}, -X^{5}C(O)R^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{14}R^{12}, \\ \end{array}$ 

 $-X^5NR^{12}C(O)R^{14}$ ,  $-X^5NR^{12}C(O)OR^{14}$ ,  $-X^5C(O)NR^{14}R^{12}$ ,  $-X^5S(O)_2NR^{14}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{14}$ ,  $-X^5NR^{12}C(O)NR^{14}R^{12}$  and  $-X^5NR^{12}C(NR^{12})NR^{14}R^{12}$  wherein  $X^5$ ,  $R^{12}$ ,  $R^{13}$  and  $R^{14}$  are as defined above;

 $R^4 \text{ is selected from } -X^8NR^{12}R^{12}, -X^8NR^{12}C(O)R^{12}, -X^8NR^{12}C(O)OR^{12}, -X^8NR^{12}C(O)NR^{12}R^{12}, \\ -X^8NR^{12}C(NR^{12})NR^{12}R^{12}, -X^8OR^{12}, -X^8SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^8OC(O)R^{12}, \\ -X^5C(O)NR^{12}R^{12}, -X^8S(O)_2NR^{12}R^{12}, -X^8NR^{12}S(O)_2R^{12}, -X^8P(O)(OR^{12})OR^{12}, \\ -X^8OP(O)(OR^{12})OR^{12}, -X^5C(O)R^{13}, -X^8NR^{12}C(O)R^{13}, -X^8S(O)R^{13}, -X^8S(O)_2R^{13}, -R^{14}, -X^8OR^{14}, \\ -X^8SR^{14}, -X^8S(O)R^{14}, -X^8S(O)_2R^{14}, -X^5C(O)R^{14}, -X^5C(O)OR^{14}, -X^8OC(O)R^{14}, -X^8NR^{12}R^{12}, \\ -X^8NR^{12}C(O)R^{14}, -X^8NR^{12}C(O)OR^{14}, -X^5C(O)NR^{14}R^{12}, -X^8S(O)_2NR^{14}R^{12}, -X^8NR^{12}S(O)_2R^{14}, \\ -X^8NR^{12}C(O)NR^{14}R^{12} \text{ and } -X^8NR^{12}C(NR^{12})NR^{14}R^{12} \text{ wherein } X^8 \text{ is } (C_{1-6})\text{alkylene and } X^5, R^{12}, \\ R^{13} \text{ and } R^{14} \text{ are as defined above, with the proviso that when } X^3 \text{ is cyano and } X^2 \text{ is } -OR^4, \text{ where } R^4 \text{ is defined as } -R^{14}, \text{ then } R^{14} \text{ is } (C_{3-10})\text{cycloalkyl}(C_{1-6})\text{alkyl}, \text{ hetero}(C_{3-10})\text{cycloalkyl}(C_{1-6})\text{alkyl}, \\ (C_{6-10})\text{aryl}(C_{1-6})\text{alkyl}, \text{ hetero}(C_{5-10})\text{aryl}(C_{1-6})\text{alkyl}, (C_{9-10})\text{bicycloaryl}(C_{1-6})\text{alkyl}; \\ \end{cases}$ 

 $R^{15}$  is  $(C_{6-10})$ aryl, hetero $(C_{5-10})$ aryl,  $(C_{9-10})$ bicycloaryl or hetero $(C_{8-10})$ bicycloaryl;  $R^{17}$  is  $(C_{1-6})$ alkyl,  $(C_{3-10})$ cycloalkyl $(C_{1-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{1-6})$ alkyl,  $(C_{6-10})$ aryl $(C_{1-6})$ alkyl, hetero $(C_{5-10})$ aryl $(C_{1-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{1-6})$ alkyl or hetero $(C_{8-10})$ bicycloaryl $(C_{1-6})$ alkyl;

 $R^{18}$  is  $(C_{1-6})$ alkyl,  $(C_{3-10})$ cycloalkyl $(C_{1-6})$ alkyl, hetero $(C_{3-10})$ cycloalkyl $(C_{1-6})$ alkyl,  $(C_{6-10})$ aryl $(C_{1-6})$ alkyl, hetero $(C_{5-10})$ aryl $(C_{1-6})$ alkyl,  $(C_{9-10})$ bicycloaryl $(C_{1-6})$ alkyl or hetero $(C_{8-10})$ bicycloaryl $(C_{1-6})$ alkyl; and

 $R^{19}$  and  $R^{20}$  together with the atoms to which  $R^{19}$  and  $R^{20}$  are attached form (C<sub>4-8</sub>)heterocycloalkylene, wherein no more than one of the ring member atoms comprising the ring is a heteroatom selected from -NR<sup>21</sup>- or -O-, wherein the ring is unsubstituted or substituted with R<sup>2</sup>, wherein R<sup>2</sup> is as defined above, and R<sup>21</sup> is hydrogen, -C(O)OR<sup>12</sup>, -C(O)R<sup>12</sup>,  $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-S(O)R^{13}$  and  $-S(O)_2R^{13}$ ,  $-S(O)R^{14}$ ,  $-S(O)_2R^{14}$ ,  $-C(O)R^{14}$ , -C(O)OR<sup>14</sup>, -C(O)NR<sup>12</sup>R<sup>12</sup> and -S(O)<sub>2</sub>NR<sup>14</sup>R<sup>12</sup>, wherein R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined above: wherein within R<sup>3</sup>, R<sup>4</sup>, R<sup>15</sup>, R<sup>17</sup> and R<sup>18</sup> any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano, halo, halo-substituted(C<sub>1-4</sub>)alkyl, nitro, -X<sup>5</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)R<sup>12</sup>,  $-X^5NR^{12}C(O)OR^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(NR^{12})NR^{12}R^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5SR^{12}$ .  $-X^5C(O)OR^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5OC(O)R^{12}$ ,  $-X^5C(O)NR^{12}R^{12}$ ,  $-X^5S(O)NR^{12}R^{12}$  $-X^5NR^{12}S(O)_2R^{12}$ ,  $-X^5P(O)(OR^{12})OR^{12}$ ,  $-X^5OP(O)(OR^{12})OR^{12}$ ,  $-X^5NR^{12}C(O)R^{13}$ ,  $-X^5S(O)R^{13}$ .  $-X^5C(O)R^{13}$  and  $-X^5S(O)_2R^{13}$  and/or 1 radical selected from  $-R^{14}$ ,  $-X^5OR^{14}$ ,  $-X^5SR^{14}$ ,  $-X^{5}S(O)R^{14}$ ,  $-X^{5}S(O)_{2}R^{14}$ ,  $-X^{5}C(O)R^{14}$ ,  $-X^{5}C(O)OR^{14}$ ,  $-X^{5}OC(O)R^{14}$ ,  $-X^{5}NR^{14}R^{12}$ .  $-X^5NR^{12}C(O)R^{14}$ ,  $-X^5NR^{12}C(O)OR^{14}$ ,  $-X^5C(O)NR^{14}R^{12}$ ,  $-X^5S(O)_2NR^{14}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{14}$ . -X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup>; and within R<sup>3</sup> and R<sup>4</sup> any aliphatic moiety is unsubstituted or substituted further by 1 to 5 radicals independently selected from evano, halo, nitro, -NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>12</sup>, -NR<sup>12</sup>C(O)OR<sup>12</sup>, -NR<sup>12</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>12</sup>R<sup>12</sup>,  $-OR^{12}$ ,  $-SR^{12}$ ,  $-C(O)OR^{12}$ ,  $-C(O)R^{12}$ ,  $-OC(O)R^{12}$ ,  $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-NR^{12}S(O)_2R^{12}$ . -P(O)(OR<sup>12</sup>)OR<sup>12</sup>, -OP(O)(OR<sup>12</sup>)OR<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>13</sup>, -S(O)R<sup>13</sup> and -S(O)<sub>2</sub>R<sup>13</sup>; wherein X<sup>5</sup>, R<sup>12</sup>,  $R^{13}$  and  $R^{14}$  are as described above, with the proviso that when  $X^2$  is  $-OR^4$ , where  $R^4$  is defined as -R<sup>14</sup>, or -NHR<sup>18</sup>, then any aromatic ring system present within R<sup>14</sup> or R<sup>18</sup> is not substituted further by halo,  $(C_{3-10})$  cycloalkyl, hetero  $(C_{3-10})$  cycloalkyl,  $(C_{6-10})$  aryl, hetero  $(C_{5-10})$  aryl,  $(C_{9-10})$  bicycloaryl or hetero $(C_{8-10})$  bicycloaryl; with the proviso that only one bicyclic ring structure is present within R<sup>3</sup>, R<sup>4</sup> or R<sup>15</sup>; N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof. and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

6. (Currently Amended) A compound of Claim 1 or 2 in which:

 $X^1$  is -NHC( $R^1$ )( $R^2$ ) $X^3$  or -NHCH( $R^{19}$ )C(O) $R^{20}$ ;

 $X^2$  is -OH, -OC(O)NR<sup>12</sup>R<sup>12</sup> or -OC(O)R<sup>14</sup>, wherein R<sup>12</sup> and R<sup>14</sup> are as defined below;

 $X^3$  is cyano,  $-C(R^7)(R^8)R^{16}$ ,  $-C(R^6)(OR^6)_2$ ,  $-CH_2C(O)R^{16}$ ,  $-CH=CHS(O)_2R^5$ ,

 $-C(O)CF_2C(O)NR^5R^5$ ,  $-C(O)C(O)NR^5R^6$ ,  $-C(O)C(O)OR^5$ ,  $-C(O)CH_2OR^5$ ,

-C(O)CH<sub>2</sub>N(R<sup>6</sup>)SO<sub>2</sub>R<sup>5</sup> or -C(O)C(O)R<sup>5</sup>; wherein R<sup>5</sup> is hydrogen, (C<sub>1-4</sub>)alkyl,

 $(C_{3\text{-}10}) cycloalkyl (C_{0\text{-}6}) alkyl, \ hetero(C_{3\text{-}10}) cycloalkyl (C_{0\text{-}3}) alkyl, \ (C_{6\text{-}10}) aryl (C_{0\text{-}6}) alkyl, \ hetero(C_{5\text{-}10}) aryl (C_{0\text{-}6}) alkyl, \ (C_{9\text{-}10}) bicycloaryl (C_{0\text{-}6}) alkyl \ or \ hetero(C_{8\text{-}10}) bicycloaryl (C_{0\text{-}6}) alkyl; \ hetero(C_{5\text{-}10}) aryl (C_{0\text{-}6}) alkyl, \ hetero(C_{9\text{-}10}) bicycloaryl (C_{0\text{-}6}) alkyl; \ hetero(C_{9\text{-}10}) bicycloaryl (C_{9\text{-}10}) bicyc$ 

 $R^6$  is hydrogen, hydroxy or  $(C_{1-6})$ alkyl; or where  $X^3$  contains an -NR $^5$ R $^6$  group,  $R^5$  and  $R^6$  together with the nitrogen atom to which they are both attached, form hetero( $C_{3-10}$ )cycloalkyl, hetero( $C_{5-10}$ )aryl or hetero( $C_{8-10}$ )bicycloaryl;  $R^7$  is hydrogen or  $(C_{1-4})$ alkyl and  $R^8$  is hydroxy or  $R^7$  and  $R^8$  together form oxo;  $R^{16}$  is hydrogen, -X $^4$ , -CF $_3$ , -CF $_2$ CF $_2$ R $^9$  or -N( $R^6$ )OR $^6$ ;  $R^9$  is hydrogen, halo,  $(C_{1-4})$ alkyl,  $(C_{5-10})$ aryl( $C_{0-6}$ )alkyl or  $(C_{5-10})$ heteroaryl( $C_{0-6}$ )alkyl;

 $X^4$  is comprises a heteromonocyclic ring containing 4 to 7 ring member atoms or a fused heterobicyclic ring system containing 8 to 14 ring member atoms and any carbocyclic ketone, iminoketone or thioketone derivative thereof;

wherein within  $R^5$ ,  $X^3$  or  $X^4$  any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl,  $(C_{1-6})$ alkylidene, cyano, halo, halo-substituted $(C_{1-4})$ alkyl, nitro,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5C(O)R^{12}$ ,

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R^1 is hydrogen or (C_{1-6}) alkyl and R^2 is selected from a group consisting of hydrogen, cyano.
 -X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)OR^{12}, -R^{12}, -X^5NR^{12}C(O)NR^{12}R^{12}.
 -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^5OC(O)R^{12},
 -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}, -X^5P(O)(OR^{12})OR^{12},
-X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)_2R^{13}, -R^{14}, -X^5OR^{14}, -X^5SR^{14}.
-X^{5}S(O)R^{14}, -X^{5}S(O)_{2}R^{14}, -X^{5}C(O)R^{14}, -X^{5}C(O)OR^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{14}R^{12},
-X^5NR^{12}C(O)R^{14}, -X^5NR^{12}C(O)OR^{14}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{14}R^{12}, -X^5NR^{12}S(O)_2R^{14}.
-X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup>, wherein X<sup>5</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined
above; or R<sup>1</sup> and R<sup>2</sup> taken together with the carbon atom to which both R<sup>1</sup> and R<sup>2</sup> are attached
form (C<sub>3-8</sub>)cycloalkylene or (C<sub>3-8</sub>)heterocycloalkylene; wherein within said R<sup>2</sup> any heteroaryl,
aryl, cycloalkyl, heterocycloalkyl, cycloalkylene or heterocycloalkylene is unsubstituted or
substituted with 1 to 3 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano,
halo, halo-substituted(C<sub>1-4</sub>)alkyl, nitro, -X<sup>5</sup>NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>C(O)OR<sup>12</sup>,
-X^5NR^{12}C(O)NR^{12}R^{12}, -X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}.
-X^5C(O)R^{12}, -X^5OC(O)R^{12}, -X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}.
-X^5P(O)(OR^{12})OR^{12}, -X^5OP(O)(OR^{12})OR^{12}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)R^{13} and
-X<sup>5</sup>C(O)R<sup>13</sup>, wherein X<sup>5</sup>, R<sup>12</sup> and R<sup>13</sup> are as defined above;
R^3 is (C_{1-6})alkyl or -C(R^6)(R^6)X^6, wherein R^6 is hydrogen or (C_{1-6})alkyl and X^6 is selected from
-X^5NR^{12}R^{12}, -X^5NR^{12}C(O)R^{12}, -X^5NR^{12}C(O)OR^{12}, -X^5NR^{12}C(O)NR^{12}R^{12}.
-X^5NR^{12}C(NR^{12})NR^{12}R^{12}, -X^5OR^{12}, -X^5SR^{12}, -X^5C(O)OR^{12}, -X^5C(O)R^{12}, -X^5OC(O)R^{12}.
-X^5C(O)NR^{12}R^{12}, -X^5S(O)_2NR^{12}R^{12}, -X^5NR^{12}S(O)_2R^{12}, -X^5P(O)(OR^{12})OR^{12}.
-X^5OP(O)(OR^{12})OR^{12}, -X^5C(O)R^{13}, -X^5NR^{12}C(O)R^{13}, -X^5S(O)R^{13}, -X^5S(O)R^{13}, -X^5OR^{14}, -X^5OR^{14}
-X^{5}SR^{14}, -X^{5}S(O)R^{14}, -X^{5}S(O)_{2}R^{14}, -X^{5}C(O)R^{14}, -X^{5}C(O)OR^{14}, -X^{5}OC(O)R^{14}, -X^{5}NR^{14}R^{12}.
-X^5NR^{12}C(O)R^{14}, -X^5NR^{12}C(O)OR^{14}, -X^5C(O)NR^{14}R^{12}, -X^5S(O)_2NR^{14}R^{12}, -X^5NR^{12}S(O)_2R^{14}.
-X<sup>5</sup>NR<sup>12</sup>C(O)NR<sup>14</sup>R<sup>12</sup> and -X<sup>5</sup>NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>14</sup>R<sup>12</sup> wherein X<sup>5</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined
above; and
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 $R^{19}$  and  $R^{20}$  together with the atoms to which  $R^{19}$  and  $R^{20}$  are attached form  $(C_{4-8})$ heterocycloalkylene, wherein no more than one of the ring member atoms comprising the ring is a heteroatom selected from -NR<sup>21</sup>- or -O-, wherein and the ring is unsubstituted or substituted with  $R^2$ , wherein  $R^2$  is as defined above, and  $R^{21}$  is hydrogen, -C(O)OR<sup>12</sup>, -C(O)R<sup>12</sup>,

 $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-S(O)R^{13}$  and  $-S(O)_2R^{13}$ ,  $-S(O)R^{14}$ ,  $-S(O)_2R^{14}$ ,  $-C(O)R^{14}$ , -C(O)OR<sup>14</sup>, -C(O)NR<sup>12</sup>R<sup>12</sup> and -S(O)<sub>2</sub>NR<sup>14</sup>R<sup>12</sup>, wherein R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as defined above; wherein within R<sup>3</sup>, R<sup>4</sup>, R<sup>15</sup>, R<sup>17</sup> and R<sup>18</sup> any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from (C<sub>1-6</sub>)alkyl, (C<sub>1-6</sub>)alkylidene, cyano, halo, halo-substituted( $C_{1-4}$ )alkyl, nitro,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5NR^{12}C(O)OR^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(NR^{12})NR^{12}R^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5SR^{12}$  $-X^5C(O)OR^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5OC(O)R^{12}$ ,  $-X^5C(O)NR^{12}R^{12}$ ,  $-X^5S(O)_2NR^{12}R^{12}$  $-X^5NR^{12}S(O)_2R^{12}$ ,  $-X^5P(O)(OR^{12})OR^{12}$ ,  $-X^5OP(O)(OR^{12})OR^{12}$ ,  $-X^5NR^{12}C(O)R^{13}$ ,  $-X^5S(O)R^{13}$ ,  $-X^5C(O)R^{13}$  and  $-X^5S(O)_2R^{13}$  and/or 1 radical selected from  $-R^{14}$ ,  $-X^5OR^{14}$ ,  $-X^5SR^{14}$ ,  $-X^{5}S(O)R^{14}$ ,  $-X^{5}S(O)_{2}R^{14}$ ,  $-X^{5}C(O)R^{14}$ ,  $-X^{5}C(O)OR^{14}$ ,  $-X^{5}OC(O)R^{14}$ ,  $-X^{5}NR^{14}R^{12}$ .  $-X^5NR^{12}C(O)R^{14}$ ,  $-X^5NR^{12}C(O)OR^{14}$ ,  $-X^5C(O)NR^{14}R^{12}$ ,  $-X^5S(O)_2NR^{14}R^{12}$ ,  $-X^5NR^{12}S(O)_2R^{14}$ .  $-X^5NR^{12}C(O)NR^{14}R^{12}$  and  $-X^5NR^{12}C(NR^{12})NR^{14}R^{12}$ ; and within  $R^3$  and  $R^4$  any aliphatic moiety is unsubstituted or substituted further by 1 to 5 radicals independently selected from cyano, halo, nitro, -NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>12</sup>, -NR<sup>12</sup>C(O)OR<sup>12</sup>, -NR<sup>12</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -NR<sup>12</sup>C(NR<sup>12</sup>)NR<sup>12</sup>R<sup>12</sup>,  $-OR^{12}$ ,  $-SR^{12}$ ,  $-C(O)OR^{12}$ ,  $-C(O)R^{12}$ ,  $-OC(O)R^{12}$ ,  $-C(O)NR^{12}R^{12}$ ,  $-S(O)_2NR^{12}R^{12}$ ,  $-NR^{12}S(O)_2R^{12}$ -P(O)(OR<sup>12</sup>)OR<sup>12</sup>, -OP(O)(OR<sup>12</sup>)OR<sup>12</sup>, -NR<sup>12</sup>C(O)R<sup>13</sup>, -S(O)R<sup>13</sup> and -S(O)<sub>2</sub>R<sup>13</sup>; wherein X<sup>5</sup>, R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> are as described above; with the proviso that only one bicyclic ring structure is present within R<sup>3</sup>, R<sup>4</sup> or R<sup>15</sup>; N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof. and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

7. (Withdrawn-currently Amended) The compound of Claim 1 or Claim 2 in which:  $X^{1} \text{ is -NHC}(R^{1})(R^{2})C(O)C(O)NR^{5}R^{6}, \text{ wherein } R^{5} \text{ is hydrogen, } (C_{1-4})\text{alkyl,} \\ (C_{3-10})\text{cycloalkyl}(C_{0-6})\text{alkyl, hetero}(C_{3-10})\text{cycloalkyl}(C_{0-3})\text{alkyl, } (C_{6-10})\text{aryl}(C_{0-6})\text{alkyl,} \\ \text{hetero}(C_{5-10})\text{aryl}(C_{0-6})\text{alkyl, } (C_{9-10})\text{bicycloaryl}(C_{0-6})\text{alkyl or hetero}(C_{8-10})\text{bicycloaryl}(C_{0-6})\text{alkyl} \\ \text{and } R^{6} \text{ is hydrogen, hydroxy or } (C_{1-6})\text{alkyl or } R^{5} \text{ and } R^{6} \text{ together with the nitrogen atom to which they are both attached form hetero}(C_{3-10})\text{cycloalkyl, hetero}(C_{5-10})\text{aryl or hetero}(C_{8-10})\text{bicycloaryl;}$ 

# X<sup>2</sup> is hydrogen;

wherein within  $X^1$  any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl,  $(C_{1-6})$ alkylidene, cyano, halo, halo-substituted $(C_{1-4})$ alkyl, nitro,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5NR^{12}C(O)OR^{12}$ ,  $-X^5NR^{12}C(O)NR^{12}R^{12}$ ,  $-X^5NR^{12}C(NR^{12})NR^{12}R^{12}$ ,  $-X^5OR^{12}$ ,  $-X^5SR^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5C(O)R^{$ 

 $R^1$  is hydrogen and  $R^2$  is  $(C_{1-6})$ alkyl; and

 $R^3$  is  $-CH_2X^6$ , wherein  $X^6$  is  $-X^5NR^{12}S(O)_2R^{12}$  or  $-X^5S(O)_2R^{14}$  wherein  $X^5$ ,  $R^{12}$  and  $R^{14}$  are as defined above;

wherein within  $R^3$  any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl,  $(C_{1-6})$ alkylidene, cyano, halo, halo-substituted  $(C_{1-4})$ alkyl, nitro,  $-X^5NR^{12}R^{12}$ ,  $-X^5NR^{12}C(O)R^{12}$ ,  $-X^5C(O)R^{12}$ ,  $-X^5$ 

*N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the *N*-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof. and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

## 8. (Currently Amended) The compound of Claim 3 in which:

X¹ is -NHC(R¹)(R²)X³ or -NHCH(R¹9)C(O)R²0, wherein R¹ is hydrogen or (C₁-6)alkyl and R² is hydrogen, (C₁-6)alkyl, -X⁵OR¹², -X⁵S(O)R¹³, -X⁵OR¹⁴, (C<sub>6-10</sub>)aryl(C₀-6)alkyl or hetero(C₅-10)aryl(C₀-6)alkyl or R¹ and R² taken together with the carbon atom to which both R¹ and R² are attached form (C₃-6)cycloalkylene or (C₃-6)heterocycloalkylene, wherein within said R² any heteroaryl, aryl, cycloalkylene or heterocycloalkylene is unsubstituted or substituted with (C₁-6)alkyl or hydroxy, wherein X³ is cyano, -C(O)R¹6, -C(R⁶)(OR⁶)₂, -CH=CHS(O)₂R⁵, -CH₂C(O)R¹6, -C(O)CF₂C(O)NR⁵R⁵, -C(O)C(O)NR⁵R⁶, -C(O)C(O)OR⁵, -C(O)CH₂OR⁵, -C(O)CH₂N(R⁶)SO₂R⁵ or -C(O)C(O)R⁵ and R¹9 and R²0 together with the atoms to which R¹9 and R²0 are attached form (C₄-8)heterocycloalkylene, wherein no more than one of the ring member atoms comprising the ring is a heteroatom selected from -NR²¹- or -O-, wherein the ring is unsubstituted or substituted with (C₁-6)alkyl or -X⁵C(O)OR¹² and R²¹ is hydrogen, (C₁-6)alkyl, -X⁵C(O)R¹², -X⁵C(O)OR¹², -R¹⁴, -X⁵C(O)R¹⁴ or -C(O)OR¹⁴;

 $X^2$  is -OH or -OC(O)NR<sup>12</sup>R<sup>12</sup>, wherein each R<sup>12</sup> independently represent hydrogen or (C<sub>1-6</sub>)alkyl, wherein said alkyl is unsubstituted or substituted with hydroxy or methoxy, or  $X^2$  is -OC(O)NHR<sup>14</sup>, wherein R<sup>14</sup> is (C<sub>3-10</sub>)cycloalkyl(C<sub>0-6</sub>)alkyl or hetero(C<sub>3-10</sub>)cycloalkyl(C<sub>1-3</sub>)alkyl, or  $X^2$  is -OC(O)R<sup>14</sup>, wherein R<sup>14</sup> is -NR<sup>22</sup>R<sup>23</sup> and R<sup>22</sup> and R<sup>23</sup> together with the nitrogen atom to which both R<sup>22</sup> and R<sup>23</sup> attached form a hetero(C<sub>4-6</sub>)cycloalkyl ring, which ring may be unsubstituted or substituted with hydroxy; and

R<sup>3</sup> is -CH<sub>2</sub>X<sup>6</sup>; wherein X<sup>6</sup> is is selected from -X<sup>5</sup>SR<sup>12</sup>, -X<sup>5</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup>, -X<sup>5</sup>C(O)R<sup>13</sup>, -X<sup>5</sup>C(O)R<sup>13</sup>, -X<sup>5</sup>C(O)R<sup>14</sup>, -X<sup>5</sup>C(O)R<sup>14</sup>, -X<sup>5</sup>C(O)R<sup>14</sup>, -X<sup>5</sup>C(O)NR<sup>14</sup>R<sup>12</sup>; N-oxide-derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and

mixtures of stereoisomers thereof.and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

## 9. (Currently Amended) The compound of Claim 8 in which:

 $X^3$  is cyano, -C(O)X<sup>4</sup>, -C(O)H, -C(O)N(CH<sub>3</sub>)OCH<sub>3</sub>, -CH(OCH<sub>3</sub>)<sub>2</sub>, -C(O)CF<sub>3</sub>, -C(O)CF<sub>2</sub>CF<sub>3</sub>, -CH<sub>2</sub>C(O)R<sup>16</sup>, (E)-2-benzenesulfonyl-vinyl, 2-dimethylcarbamoyl-2,2-difluoro-acetyl, 2-oxo-2-pyrrolidin-1-yl-acetyl, 2-morpholin-4-yl-2-oxo-acetyl, 2-oxo-2-piperazin-1-yl-acetyl, 2-(4-methanesulfonyl-piperazin-1-yl)-2-oxo-acetyl, 2-(1,1-dioxo-1 $\Box$ <sup>6</sup>-thiomorpholin-4-yl)-2-oxo-acetyl, dimethylaminooxalyl, tetrahydro-pyran-4-ylaminooxalyl, 2-morpholin-4-yl-ethylaminooxalyl, cyclopentyl-ethyl-aminooxalyl, pyridin-3-ylaminooxalyl, phenylaminooxalyl, 1-benzoyl-piperidin-4-ylaminooxalyl, 1-benzylcarbamoyl-methanoyl, 1-benzyloxy(oxalyl), 2-benzyloxy-acetyl, 2-benzenesulfonylamino-ethanoyl, 2-oxo-2-phenyl-ethanoyl, 3*H*-oxazole-2-carbonyl, 5-trifluoromethyl-oxazole-2-carbonyl, 3-trifluoromethyl-[1,2,4]oxadiazole-5-carbonyl, 2,2,3,3,3-pentafluoro-propionyl, hydroxyaminooxalyl, oxalyl, 2-(1,3-dihydro-isoindol-2-yl)-2-oxo-acetyl, benzothiazol-2-ylaminooxalyl, 2-oxo-ethyl, 2-oxazol-2-yl-2-oxo-ethyl or 2-benzooxazol-2-yl-2-oxo-ethyl;

X² is selected from -OH, dimethylcarbamoyloxy, morpholin-4-ylcarbonyloxy, piperidin-1-yl-carbonyloxy, pyrrolidin-1-yl-carbonyloxy, pyrrimidin-2-ylamino, tetrahydro-pyran-4-ylamino, 1-methyl-piperidin-4-ylamino, N-(2-methoxyethyl)-N-(tetrahydro-pyran-4-yl)amino, isopropylamino and cyclohexylamino; 4-tert-butoxycarbonylpiperazin-1-ylcarbonyloxy, N-benzyl-carbamoyloxy, pyrrolidin-1-yl-carbonyloxy, N,N-dimethyl-carbamoyloxy, piperidin-1-yl-carbonyloxy, 4-methanesulfonyl-piperazin-1-yl-carbonyloxy, N-phenyl-carbamoyloxy, N-(5,6,7,8-tetrahydro-naphthalen-1-yl)-carbamoyloxy, N-butyl-N-methyl-carbamoyloxy, N-pyridin-3-yl-carbamoyloxy, N-isopropyl-carbamoyloxy, N-pyridin-4-yl-carbamoyloxy, N-pyridin-4-yl-carbamoyloxy, N-phenethyl-carbamoyloxy, N-phenethyl-carbamoyloxy,

- 2-methoxyethylcarbamoyloxy, diethylcarbamoyloxy, pyrrolidin-1-ylcarbonyloxy,
- 2-hydroxyethylcarbamoyloxy, tetrahydro-furan-2-ylmethylcarbamoyloxy,
- cyclopropylcarbamoyloxy, *tert*-butylcarbamoyloxy, 3-hydroxy-pyrrolidin-1-yl-carbonyloxy and carbamoyloxy; and
- R<sup>3</sup> is thiophene-2-sulfonyl-methyl, 3-chloro-2-fluoro-phenyl-methane-sulfonyl-methyl, benzene-sulfonyl-methyl, phenyl-methane-sulfonyl-methyl, 2-(1,1-difluoro-methoxy)-phenyl-methane-sulfonyl-methyl, 2-benzene-sulfonyl-ethyl, 2-(pyridine-2-sulfonyl)-ethyl,
- 2-(pyridine-4-sulfonyl)-ethyl, 2-phenyl-methanesulfonyl-ethyl, oxy-pyridin-2-yl-methanesulfonyl-methyl, prop-2-ene-1-sulfonyl-methyl, 4-methoxy-phenyl-methane-sulfonyl-methyl, p-tolyl-methane-sulfonyl-methyl, 4-chloro-phenyl-methane-sulfonyl-methyl, o-tolyl-methanesulfonyl-methyl, 4-trifluoro-methyl-phenyl-methane-sulfonyl-methyl, 4-trifluoro-methyl, 4-trifluoro-methyl, 4-trifluoro-methyl, 4-trifluoro-methyl,
- 2-bromo-phenyl-methane-sulfonyl-methyl, pyridin-2-yl-methane-sulfonyl-methyl, pyridin-3-yl-methane-sulfonyl-methyl, pyridin-4-yl-methane-sulfonyl-methyl, naphthalen-2-yl-methane-sulfonyl-methyl, 3-trifluoro-methyl-phenyl-methane-sulfonyl-methyl, 3-trifluoro-methyl, 3-trifluoro-methoxy-phenyl-methane-sulfonyl-methyl,
- 4-fluoro-2-trifluoromethoxy-phenyl-methane-sulfonylmethyl,
- 2-fluoro-6-trifluoromethyl-phenylmethanesulfonylmethyl,
- 3-chloro-phenylmethanesulfonylmethyl, 2-fluoro-phenylmethanesulfonylmethyl,
- 2-trifluoro-phenylmethanesulfonylmethyl, 2-cyano-phenylmethanesulfonylmethyl,
- 4-tert-butyl-phenylmethanesulfonylmethyl, 2-fluoro-3-methyl-phenyl-methane-sulfonyl-methyl,
- 3-fluoro-phenylmethanesulfonylmethyl, 4-fluoro-phenylmethane-sulfonylmethyl,
- 2-chloro-phenylmethanesulfonylmethyl, 2,5-difluoro-phenylmethane-sulfonylmethyl,
- 2,6-difluoro-phenylmethanesulfonylmethyl, 2,5-dichloro-phenyl-methane-sulfonylmethyl,
- 3,4-dichloro-phenylmethanesulfonylmethyl, 2-(1,1-difluoro-methoxy)-phenylmethanesulfonylmethyl, 2-cyano-phenyl-methane-sulfonyl-methyl,
- 3-cyano-phenylmethanesulfonylmethyl, 2-trifluoro-methoxy-phenyl-methane-sulfonylmethyl,
- 2, 3- difluoro-phenyl methane sulfonyl methyl, 2, 5- difluoro-phenyl-methane sulfonyl methyl,
- biphenyl-2-ylmethanesulfonylmethyl, cyclohexylmethyl, 3-fluoro-phenyl-
- methanesulfonylmethyl, 3,4-difluoro-phenyl-methanesulfonylmethyl,
- 2,4-difluoro-phenylmethanesulfonylmethyl, 2,4,6-trifluoro-phenylmethanesulfonylmethyl,

2,4,5-trifluoro-phenylmethanesulfonylmethyl, 2,3,4-trifluoro-phenylmethanesulfonylmethyl, 2,3,5-trifluoro-phenyl-methane-sulfonylmethyl, 2,5,6-trifluoro-phenylmethanesulfonylmethyl, 2-chloro-5-trifluoro-methylphenylmethanesulfonylmethyl, 2-methyl-propane-1-sulfonyl, 2-fluoro-3-trifluoro-methylphenylmethanesulfonylmethyl, 2-fluoro-4-trifluoromethylphenylmethanesulfonylmethyl, 2-fluoro-5-trifluoro-methyl-phenyl-methane-sulfonylmethyl, 4-fluoro-3-trifluoro-methylphenylmethanesulfonylmethyl, 2-methoxy-phenylmethanesulfonylmethyl, 3,5-bis-trifluoromethyl-phenylmethanesulfonylmethyl, 4-difluoromethoxy-phenylmethanesulfonylmethyl, 2-difluoro-methoxy-phenylmethanesulfonylmethyl, 3-difluoromethoxy-phenylmethanesulfonylmethyl, 2,6-dichlorophenylmethanesulfonylmethyl, biphenyl-4-ylmethanesulfonylmethyl, 3,5-dimethyl-isoxazol-4-ylmethanesulfonylmethyl, 5-chloro-thien-2-yl-methane-sulfonylmethyl, 2-[4-(1,1-difluoro-methoxy)-benzenesulfonyl]-ethyl, 2-[2-(1,1-difluoro-methoxy)-benzenesulfonyl]-ethyl, 2-[3-(1,1-difluoromethoxy)-benzenesulfonyl]-ethyl, 2-(4-trifluoromethoxy-benzenesulfonyl)-ethyl, 2-(3-trifluoromethoxy-benzene-sulfonyl)-ethyl, 2-(2-trifluoro-methoxy-benzene-sulfonyl)-ethyl, (cyanomethyl-methyl-carbamoyl)-methyl, biphenyl-3-ylmethyl, 2-oxo-2-pyrrolidin-1-yl-ethyl, 2-benzenesulfonyl-ethyl, isobutylsulfanylmethyl, 2-phenylsulfanyl-ethyl, cyclohexylmethanesulfonylmethyl, 2-cyclohexyl-ethanesulfonyl, benzyl, naphthalen-2-yl, benzylsulfanylmethyl, 2-trifluoromethyl-benzylsulfanylmethyl, phenylsulfanyl-ethyl, cyclopropyl-methanesulfonylmethyl, 5-bromo-thien-2-ylmethyl, 3-phenyl-propyl, 2,2-difluoro-3-phenyl-propyl, 3,4,5-trimethoxy-phenylmethanesulfonylmethyl, 2,2-difluoro-3-thien-2-ylpropyl, cyclohexylethyl, cyclohexylmethyl, tert-butylmethyl, 1-methylcyclohexylmethyl, 1-methylcyclopentylmethyl, 2,2-difluoro-3-phenylpropyl, 2,2-dimethyl-3-phenylpropyl, 1-benzylcyclopropylmethyl, -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup> and -X<sup>5</sup>S(O)<sub>2</sub>R<sup>14</sup>, wherein R<sup>13</sup> is alkyl and R<sup>14</sup> is phenyl which phenyl is unsubstituted or substituted; N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

### 10. (Currently Amended) A compound of Claim 9 in which:

X³ is 1*H*-benzoimidazol-2-ylcarbonyl, pyrimidin-2-ylcarbonyl, benzooxazol-2-ylcarbonyl, benzothiazol-2-ylcarbonyl, pyridazin-3-ylcarbonyl, 3-phenyl-[1,2,4]oxadiazol-5-ylcarbonyl or 3-ethyl-[1,2,4]oxadiazol-5-ylcarbonyl, 2-oxo-2-pyrrolidin-1-yl-acetyl, 2-morpholin-4-yl-2-oxo-acetyl, 2-oxo-2-piperazin-1-yl-acetyl, 2-(4-methanesulfonyl-piperazin-1-yl)-2-oxo-acetyl, 2-(1,1-dioxo-1-thiomorpholin-4-yl)-2-oxo-acetyl, dimethylaminooxalyl, tetrahydro-pyran-4-ylaminooxalyl, 2-morpholin-4-yl-ethylaminooxalyl, cyclopentyl-ethyl-aminooxalyl, pyridin-3-ylaminooxalyl, phenylaminooxalyl or 1-benzoyl-piperidin-4-ylaminooxalyl; X² is selected from -OH, dimethylcarbamoyloxy, morpholin-4-ylcarbonyloxy, piperidin-1-yl-carbonyloxy, pyrrolidin-1-yl-carbonyloxy, pyrimidin-2-ylamino, tetrahydro-pyran-4-ylamino, 1-methyl-piperidin-4-ylamino, *N*-(2-methoxyethyl)-*N*-(tetrahydro-pyran-4-yl)amino, isopropylamino and cyclohexylamino:

R<sup>3</sup> is cyclohexylethyl, cyclohexylmethyl, *tert*-butylmethyl, 1-methylcyclohexylmethyl, 1-methylcyclopentylmethyl, 2,2-difluoro-3-phenylpropyl, 2,2-dimethyl-3-phenylpropyl, 1-benzylcyclopropylmethyl, -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup> or -X<sup>5</sup>S(O)<sub>2</sub>R<sup>14</sup>, wherein R<sup>13</sup> is alkyl and R<sup>14</sup> is phenyl which phenyl is unsubstituted or substituted; and the pharmaceutically acceptable salts and solvates of such compounds and the *N*-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof *N* oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

### 11. (Withdrawn-currently Amended) The compound of Claim 3 in which:

 $X^1$  is -NHC( $R^1$ )( $R^2$ ) $X^3$  or -NHCH( $R^{19}$ )C(O) $R^{20}$ , wherein  $R^1$  is hydrogen or ( $C_{1-6}$ )alkyl and  $R^2$  is hydrogen, ( $C_{1-6}$ )alkyl, - $X^5$ OR<sup>12</sup>, - $X^5$ S(O) $R^{13}$ , - $X^5$ OR<sup>14</sup>, ( $C_{6-10}$ )aryl( $C_{0-6}$ )alkyl or hetero( $C_{5-10}$ )aryl( $C_{0-6}$ )alkyl or  $R^1$  and  $R^2$  taken together with the carbon atom to which both  $R^1$  and  $R^2$  are attached form ( $C_{3-6}$ )cycloalkylene or ( $C_{3-6}$ )heterocycloalkylene, wherein within said  $R^2$  any heteroaryl, aryl, cycloalkylene or heterocycloalkylene is unsubstituted or substituted with ( $C_{1-6}$ )alkyl or hydroxy, wherein  $X^3$  is cyano, -C(O) $R^{16}$ , -C( $R^6$ )(OR<sup>6</sup>)<sub>2</sub>, -CH=CHS(O)<sub>2</sub> $R^5$ , -CH<sub>2</sub>C(O) $R^{16}$ , -C(O)CF<sub>2</sub>C(O)NR<sup>5</sup> $R^5$ , -C(O)C(O)NR<sup>5</sup> $R^6$ , -C(O)C(O)OR<sup>5</sup>, -C(O)CH<sub>2</sub>OR<sup>5</sup>, -C(O)CH<sub>2</sub>OR<sup>5</sup>, -C(O)CH<sub>2</sub>N( $R^6$ )SO<sub>2</sub> $R^5$  or -C(O)C(O)R<sup>5</sup> and  $R^{19}$  and  $R^{20}$  together with the atoms to which  $R^{19}$ 

and  $R^{20}$  are attached form (C<sub>4-8</sub>)heterocycloalkylene, wherein no more than one of the ring member atoms comprising the ring is a heteroatom selected from -NR<sup>21</sup>- or -O-, wherein the ring is unsubstituted or substituted with (C<sub>1-6</sub>)alkyl or -X<sup>5</sup>C(O)OR<sup>12</sup> and R<sup>21</sup> is hydrogen, (C<sub>1-6</sub>)alkyl, -X<sup>5</sup>C(O)R<sup>12</sup>, -X<sup>5</sup>C(O)OR<sup>12</sup>, -R<sup>14</sup>, -X<sup>5</sup>C(O)R<sup>14</sup> or -C(O)OR<sup>14</sup>;

 $X^2$  is -NHR<sup>15</sup>, wherein R<sup>15</sup> is  $(C_{6-10})$ aryl, hetero $(C_{5-10})$ aryl,  $(C_{9-10})$ bicycloaryl or hetero $(C_{8-10})$ bicycloaryl, or -NR<sup>17</sup>R<sup>18</sup>, wherein R<sup>17</sup> is hetero $(C_{3-10})$ cycloalkyl and R<sup>18</sup> is hydrogen or R<sup>17</sup> and R<sup>18</sup> independently are  $(C_{6-10})$ aryl $(C_{1-6})$ alkyl or hetero $(C_{5-10})$ aryl $(C_{1-6})$ alkyl, wherein within R<sup>15</sup>, R<sup>17</sup> and R<sup>18</sup> any alicyclic or aromatic ring system is unsubstituted or substituted further by 1 to 5 radicals independently selected from  $(C_{1-6})$ alkyl, cyano, halo, nitro, halo-substituted $(C_{1-4})$ alkyl, -X<sup>5</sup>OR<sup>12</sup>, -X<sup>5</sup>C(O)OR<sup>12</sup>, -X<sup>5</sup>C(O)R<sup>13</sup>, -X<sup>5</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>NR<sup>12</sup>S(O)<sub>2</sub>R<sup>12</sup> and/or 1 radical selected from -R<sup>14</sup>, -X<sup>5</sup>OR<sup>14</sup> and -X<sup>5</sup>C(O)NR<sup>14</sup>R<sup>12</sup>; and R<sup>3</sup> is -CH<sub>2</sub>X<sup>6</sup>; wherein X<sup>6</sup> is is selected from -X<sup>5</sup>SR<sup>12</sup>, -X<sup>5</sup>C(O)NR<sup>12</sup>R<sup>12</sup>, -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup>, -X<sup>5</sup>C(O)R<sup>13</sup>, -X<sup>5</sup>OR<sup>12</sup>, -X<sup>5</sup>SR<sup>14</sup>, -X<sup>5</sup>SR<sup>14</sup>, -X<sup>5</sup>S(O)<sub>2</sub>R<sup>14</sup>, -X<sup>5</sup>C(O)R<sup>14</sup>, -X<sup>5</sup>C(O)NR<sup>14</sup>R<sup>12</sup>; A-oxide-derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof.

#### 12. (Withdrawn-currently Amended) The compound of Claim 11 in which:

 $X^3$  is cyano,  $-C(O)X^4$ , -C(O)H,  $-C(O)N(CH_3)OCH_3$ ,  $-CH(OCH_3)_2$ ,  $-C(O)CF_3$ ,  $-C(O)CF_2CF_3$ ,  $-CH_2C(O)R^{16}$ , (E)-2-benzenesulfonyl-vinyl, 2-dimethylcarbamoyl-2,2-difluoro-acetyl, 2-oxo-2-pyrrolidin-1-yl-acetyl, 2-morpholin-4-yl-2-oxo-acetyl, 2-oxo-2-piperazin-1-yl-acetyl, 2-(4-methanesulfonyl-piperazin-1-yl)-2-oxo-acetyl, 2-(1,1-dioxo-1 $\Box$ ^6-thiomorpholin-4-yl)-2-oxo-acetyl, dimethylaminooxalyl, tetrahydro-pyran-4-ylaminooxalyl, 2-morpholin-4-yl-ethylaminooxalyl, cyclopentyl-ethyl-aminooxalyl, pyridin-3-ylaminooxalyl, phenylaminooxalyl, 1-benzyl-piperidin-4-ylaminooxalyl, 1-benzylcarbamoyl-methanoyl, 1-benzyloxy(oxalyl), 2-benzyloxy-acetyl, 2-benzenesulfonylamino-ethanoyl, 2-oxo-2-phenyl-ethanoyl, 3*H*-oxazole-2-carbonyl, 5-trifluoromethyl-oxazole-2-carbonyl, 3-trifluoromethyl-[1,2,4]oxadiazole-5-carbonyl, 2,2,3,3,3-pentafluoro-propionyl, hydroxyaminooxalyl, oxalyl, 2-(1,3-dihydro-isoindol-2-yl)-2-

oxo-acetyl, benzothiazol-2-ylaminooxalyl, 2-oxo-ethyl, 2-oxazol-2-yl-2-oxo-ethyl or 2-benzooxazol-2-yl-2-oxo-ethyl;

 $X^2$  is selected from 5-nitrothiazol-2-ylamino, 2-nitrophenylamino, pyrimidin-2-ylamino, tetrahydro-pyran-4-ylamino, N-(2-methoxyethyl)-N-(tetrahydro-pyran-4-yl)amino, 1-methyl-piperidin-4-ylamino, isopropylamino, di(thien-2-ylmethyl)amino or di(benzyl)amino; and

R<sup>3</sup> is thiophene-2-sulfonyl-methyl, 3-chloro-2-fluoro-phenyl-methane-sulfonyl-methyl, benzene-sulfonyl-methyl, phenyl-methane-sulfonyl-methyl, 2-(1,1-difluoro-methoxy)-phenyl-methane-sulfonyl-methyl, 2-benzene-sulfonyl-ethyl, 2-(pyridine-2-sulfonyl)-ethyl,

2-(pyridine-4-sulfonyl)-ethyl, 2-phenyl-methanesulfonyl-ethyl, oxy-pyridin-2-yl-methanesulfonyl-methyl, prop-2-ene-1-sulfonyl-methyl, 4-methoxy-phenyl-methane-sulfonyl-methyl, p-tolyl-methane-sulfonyl-methyl, 4-chloro-phenyl-methane-sulfonyl-methyl, o-tolyl-methanesulfonyl-methyl, 3,5-dimethyl-phenyl-methane-sulfonyl-methyl, 4-trifluoro-methyl-phenyl-methane-sulfonyl-methyl, 4-trifluoro-methyl, 4-trifluoro-methyl,

2-bromo-phenyl-methane-sulfonyl-methyl, pyridin-2-yl-methane-sulfonyl-methyl, pyridin-3-yl-methane-sulfonyl-methyl, pyridin-4-yl-methane-sulfonyl-methyl, naphthalen-2-yl-methane-sulfonyl-methyl, 3-methyl-phenyl-methane-sulfonyl-methyl, 3-trifluoro-methyl-phenyl-methane-sulfonyl-methyl, 3-trifluoro-methoxy-phenyl-methane-sulfonyl-methyl,

- 4-fluoro-2-trifluoromethoxy-phenyl-methane-sulfonylmethyl,
- 2-fluoro-6-trifluoromethyl-phenylmethanesulfonylmethyl,
- 3-chloro-phenylmethanesulfonylmethyl, 2-fluoro-phenylmethanesulfonylmethyl,
- 2-trifluoro-phenylmethanesulfonylmethyl, 2-cyano-phenylmethanesulfonylmethyl,
- 4-tert-butyl-phenylmethanesulfonylmethyl, 2-fluoro-3-methyl-phenyl-methane-sulfonyl-methyl,
- 3-fluoro-phenylmethanesulfonylmethyl, 4-fluoro-phenylmethane-sulfonylmethyl,
- 2-chloro-phenylmethanesulfonylmethyl, 2,5-difluoro-phenylmethane-sulfonylmethyl,
- 2,6-difluoro-phenylmethanesulfonylmethyl, 2,5-dichloro-phenyl-methane-sulfonylmethyl,
- 3,4-dichloro-phenylmethanesulfonylmethyl, 2-(1,1-difluoro-methoxy)-phenylmethanesulfonylmethyl, 2-cyano-phenyl-methane-sulfonyl-methyl,
- 3-cyano-phenylmethanesulfonylmethyl, 2-trifluoro-methoxy-phenyl-methane-sulfonylmethyl,
- 2,3-difluoro-phenylmethanesulfonylmethyl, 2,5-difluoro-phenyl-methanesulfonylmethyl, biphenyl-2-ylmethanesulfonylmethyl, cyclohexylmethyl, 3-fluoro-phenyl-methanesulfonylmethyl, 3,4-difluoro-phenyl-methanesulfonylmethyl,

2,4-difluoro-phenylmethanesulfonylmethyl, 2,4,6-trifluoro-phenylmethanesulfonylmethyl, 2,4,5-trifluoro-phenylmethanesulfonylmethyl, 2,3,4-trifluoro-phenylmethanesulfonylmethyl, 2,3,5-trifluoro-phenyl-methane-sulfonylmethyl, 2,5,6-trifluoro-phenylmethanesulfonylmethyl, 2-chloro-5-trifluoro-methylphenylmethanesulfonylmethyl, 2-methyl-propane-1-sulfonyl, 2-fluoro-3-trifluoro-methylphenylmethanesulfonylmethyl, 2-fluoro-4-trifluoromethylphenylmethanesulfonylmethyl, 2-fluoro-5-trifluoro-methyl-phenyl-methane-sulfonylmethyl, 4-fluoro-3-trifluoro-methylphenylmethanesulfonylmethyl, 2-methoxy-phenylmethanesulfonylmethyl, 3,5-bis-trifluoromethyl-phenylmethanesulfonylmethyl, 4-difluoromethoxy-phenylmethanesulfonylmethyl, 2-difluoro-methoxy-phenylmethanesulfonylmethyl, 3-difluoromethoxy-phenylmethanesulfonylmethyl, 2,6-dichlorophenylmethanesulfonylmethyl, biphenyl-4-ylmethanesulfonylmethyl, 3,5-dimethyl-isoxazol-4-ylmethanesulfonylmethyl, 5-chloro-thien-2-yl-methane-sulfonylmethyl, 2-[4-(1,1-difluoro-methoxy)-benzenesulfonyl]-ethyl, 2-[2-(1,1-difluoro-methoxy)-benzenesulfonyl]-ethyl, 2-[3-(1,1-difluoromethoxy)-benzenesulfonyl]-ethyl, 2-(4-trifluoromethoxy-benzenesulfonyl)-ethyl, 2-(3-trifluoromethoxy-benzenesulfonyl)-ethyl, 2-(2-trifluoro-methoxy-benzene-sulfonyl)-ethyl, (cyanomethyl-methyl-carbamoyl)-methyl, biphenyl-3-ylmethyl, 2-oxo-2-pyrrolidin-1-yl-ethyl, 2-benzenesulfonyl-ethyl, isobutylsulfanylmethyl, 2-phenylsulfanyl-ethyl, cyclohexylmethanesulfonylmethyl, 2-cyclohexyl-ethanesulfonyl, benzyl, naphthalen-2-yl, benzylsulfanylmethyl, 2-trifluoromethyl-benzylsulfanylmethyl, phenylsulfanyl-ethyl, cyclopropyl-methanesulfonylmethyl, 5-bromo-thien-2-ylmethyl, 3-phenyl-propyl, 2,2-difluoro-3-phenyl-propyl, 3,4,5-trimethoxy-phenylmethanesulfonylmethyl, 2,2-difluoro-3-thien-2-ylpropyl, cyclohexylethyl, cyclohexylmethyl, tert-butylmethyl, 1-methylcyclohexylmethyl, 1-methylcyclopentylmethyl, 2,2-difluoro-3-phenylpropyl, 2,2-dimethyl-3-phenylpropyl, 1-benzylcyclopropylmethyl, -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup> and -X<sup>5</sup>S(O)<sub>2</sub>R<sup>14</sup>, wherein R<sup>13</sup> is alkyl and R<sup>14</sup> is phenyl which phenyl is unsubstituted or substituted; Noxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates of such compounds and the N-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof and the N-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

# 13. (Withdrawn-currently Amended) A compound of Claim 12 in which:

X³ is 1*H*-benzoimidazol-2-ylcarbonyl, pyrimidin-2-ylcarbonyl, benzooxazol-2-ylcarbonyl, benzothiazol-2-ylcarbonyl, pyridazin-3-ylcarbonyl, 3-phenyl-[1,2,4]oxadiazol-5-ylcarbonyl or 3-ethyl-[1,2,4]oxadiazol-5-ylcarbonyl, 2-oxo-2-pyrrolidin-1-yl-acetyl, 2-morpholin-4-yl-2-oxo-acetyl, 2-oxo-2-piperazin-1-yl-acetyl, 2-(4-methanesulfonyl-piperazin-1-yl)-2-oxo-acetyl, 2-(1,1-dioxo-1-thiomorpholin-4-yl)-2-oxo-acetyl, dimethylaminooxalyl, tetrahydro-pyran-4-ylaminooxalyl, 2-morpholin-4-yl-ethylaminooxalyl, cyclopentyl-ethyl-aminooxalyl, pyridin-3-ylaminooxalyl, phenylaminooxalyl or 1-benzoyl-piperidin-4-ylaminooxalyl; X² is selected from -OH, dimethylcarbamoyloxy, morpholin-4-ylcarbonyloxy, piperidin-1-yl-carbonyloxy, pyrrolidin-1-yl-carbonyloxy, pyrimidin-2-ylamino, tetrahydro-pyran-4-ylamino, 1-methyl-piperidin-4-ylamino, *N*-(2-methoxyethyl)-*N*-(tetrahydro-pyran-4-yl)amino, isopropylamino and cyclohexylamino:

R<sup>3</sup> is cyclohexylethyl, cyclohexylmethyl, *tert*-butylmethyl, 1-methylcyclohexylmethyl, 1-methylcyclopentylmethyl, 2,2-difluoro-3-phenylpropyl, 2,2-dimethyl-3-phenylpropyl, 1-benzylcyclopropylmethyl, -X<sup>5</sup>S(O)<sub>2</sub>R<sup>13</sup> or -X<sup>5</sup>S(O)<sub>2</sub>R<sup>14</sup>, wherein R<sup>13</sup> is alkyl and R<sup>14</sup> is phenyl which phenyl is unsubstituted or substituted; and the pharmaceutically acceptable salts and solvates of such compounds and the *N*-oxides, prodrugs, compounds thereof having protected reactive groups, stereoisomers and mixtures of stereoisomers thereof. and the *N*-oxide derivatives, prodrug derivatives, protected derivatives, individual isomers and mixtures of isomers thereof.

- 14. (Currently Amended) A compound of Claim 1 selected from the group consisting of: (*R*)-*N*-cyanomethyl-2-hydroxy-3-phenylmethanesulfonyl-propionamide;
- (R)-N-(1-cyano-1-thiophen-2-yl-methyl)-2-hydroxy-3-phenylmethanesulfonyl-propionamide;
- (*R*)-*N*-(1-cyano-1-thiophen-2-yl-methyl)-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide;
- (R)-N-cyanomethyl-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide;

morpholine-4-carboxylic acid (R)-1-(cyanomethyl-carbamoyl)-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (R)-1-(cyanomethyl-carbamoyl)-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester;

- (R)-(2-methoxy-ethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-phenylmethanesulfonyl-ethyl ester;
- (S)-diethyl-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-pyrrolidine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-morpholine-4-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-4-Ethyl-piperazine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-2-hydroxymethyl-pyrrolidine-1-carboxylic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-(2,2,2-Trifluoro-ethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-(2-hydroxyethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester; (Tetrahydrofuran-2-ylmethyl)-carbamic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-Azetidine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-cyclopropyl-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-piperidine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-(2-methoxy-ethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (R)-3-hydroxy-pyrrolidine-1-carboxylic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-3-hydroxy-pyrrolidine-1-carboxylic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-morpholine-4-carboxylic acid 1-(cyanomethyl-carbamoyl)-3-cyclohexyl-propyl ester; morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester;

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzothiazol-2-yl-methanoyl)-propylcarbamoyl]-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester;

pyrrolidine-1-carboxylic acid (R)-1-(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

dimethyl-carbamic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzylcarbamoyl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (S)-1-[(S)-1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester; morpholine-4-carboxylic acid (S)-1-[(S)-1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

- (S)-2-{(R)-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propanoylamino}-*N*-methoxy-*N*-methyl-butyramide;
- (R)-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-*N*-((S)-1-formyl-propyl)-2-hydroxy-propionamide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-hydroxy-3-phenyl-methanesulfonyl-propionamide;
- (S)-3-{3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-propanoylamino}-2-oxo-pentanoic acid benzylamide;
- *N*-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-propionamide;
- N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-3-phenyl-propyl]-3-p-tolylmethanesulfonyl-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-(1-ethyl-2,3-dioxo-3-pyrrolidin-1-yl-propyl)-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-(1-ethyl-3-morpholin-4-yl-2,3-dioxo-propyl)-propionamide;

- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-(1-ethyl-2,3-dioxo-3-piperazin-1-yl-propyl)-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-[3-(1,1-dioxo-116-thiomorpholin-4-yl)-1-ethyl-2,3-dioxo-propyl]-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-[1-ethyl-3-(4-methyl-sulfonyl-piperazin-1-yl)-2,3-dioxo-propyl]-propionamide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid dimethylamide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid cyclopentyl-ethyl-amide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid phenylamide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid pyridin-3-ylamide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid (tetrahydro-pyran-4-yl)-amide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid (1-benzoyl-piperidin-4-yl)-amide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid (2-morpholin-4-yl-ethyl)-amide;
- (R)-*N*-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-(2-nitro-phenylamino)-3-phenylmethanesulfonyl-propionamide;
- N-[1-(benzooxazole-2-carbonyl)-propyl]-3-phenylmethanesulfonyl-2-(pyrimidin-2-ylamino)-propionamide.
- (R)-*N*-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-(5-nitro-thiazol-2-ylamino)-3-phenylmethanesulfonyl-propionamide;
- (2S) (4,4-difluoro-2-hydroxy-5-phenyl-pentanoic acid (1(S)-cyano-3-phenyl-propyl)-amide; N-(1(S)-cyano-3-phenyl-propyl)-2-(S)-(2-morpholin-4-yl-2-oxo-ethoxy)-4-phenyl-butyramide;

- N-(1-(S)-cyano-3-phenyl-propyl)-2-(S)-fluoro-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2,2-difluoro-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2-(S)-hydroxy-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2-(R)-hydroxy-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2-(R)-methoxy-4-phenyl-butyramide;
- 2,2-difluoro-5-phenyl-pentanoic acid (1-cyano-cyclopropyl)-amide;
- N-(1-(S)-cyano-3-phenyl-propyl)-4-phenyl-butyramide;
- 2,2-difluoro-5-phenyl-pentanoic acid ((S)-1-cyano-3-phenyl-propyl)-amide;
- N-(4-cyano-1-ethyl-piperidin-4-yl)-3-cyclohexyl-propionamide;
- N-(4-cyano-1-ethyl-piperidin-4-yl)-3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionamide;
- (S)-tert-butyl-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (R)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-(2-difluoromethoxy-phenylmethanesulfonyl)-ethyl ester;
- (S)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (R)-morpholine-4-carboxylic acid 1-(1-cyano-cyclopropylcarbamoyl)-2-phenylmethanesulfonylethyl ester;
- (R)-morpholine-4-carboxylic acid 1-(4-cyano-tetrahydro-pyran-4-ylcarbamoyl)-2-phenylmethanesulfonyl-ethyl ester;
- 3-cyclohexyl-2-hydroxy-*N*-[1-(oxazolo[4,5-*b*]pyridine-2-carbonyl)-propyl]-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-(1-methyl-piperidin-4-ylamino)-3-phenylmethanesulfonyl-propionamide;

- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-(bis-thiophen-2-ylmethyl-amino)-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;
- (S)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-(tetrahydro-pyran-4-ylamino)-3-thiophen-2-yl-propionamide;
- (S)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-isopropylamino-3-thiophen-2-yl-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-[(2-methoxy-ethyl)-(tetrahydro-pyran-4-yl)-amino]-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-cyclohexylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;
- (1S)-N-[1-(benzooxazole-2-carbonyl)-butyl]-2-(S)-fluoro-4-phenyl-butyramide;
- 2,2-difluoro-5-phenyl-pentanoic acid [(S)-1-(benzoxazole-2-carbonyl)-butyl]-amide; morpholine-4-carboxylic acid (S)-1-[(S)-1-(benzooxazole-2-carbonyl)-propylcarbamoyl]-2-cyclohexyl-ethyl ester;
- morpholine-4-carboxylic acid (S)-2-cyclohexyl-1-[(S)-1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propylcarbamoyl]-ethyl ester;
- $morpholine-4-carboxylic\ acid\ (S)-2-cyclohexyl-1-[(S)-1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-propylcarbamoyl]-ethyl\ ester;$
- morpholine-4-carboxylic acid (S)-2-cyclohexyl-1-[(S)-1-(5-phenyl-[1,3,4]oxadiazole-2-carbonyl)-propylcarbamoyl]-ethyl ester;

- morpholine-4-carboxylic acid (S)-1-[(S)-1-(benzooxazole-2-carbonyl)-propylcarbamoyl]-3-cyclohexyl-propyl ester;
- 4-[4,4-dimethyl-2-(morpholine-4-carbonyloxy)-pentanoylamino]-3-oxo-azepane-1-carboxylic acid benzyl ester;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-3-cyclopropylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[1-(benzoxazole-2-carbonyl)-butyl]-2-cyclohexylamino-3-cyclopropylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzoxazole-2-carbonyl)-butyl]-2-cycloheptylamino-3-cyclopropylmethanesulfonyl-propionamide;
- (R)-3-phenylmethanesulfonyl-N-[(S)-3-phenyl-1-(thiazole-2-carbonyl)-propyl]-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-3-phenyl-propyl]-3-cyclopropylmethanesulfonyl-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- (R)-3-cyclopropylmethanesulfonyl-N-[1-(5-ethyl-1,2,4-oxadiazole-3-carbonyl)-propyl]-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- (R)-3-phenylmethanesulfonyl-N-[1-(3-phenyl-1,2,4-oxadiazole-5-carbonyl)-propyl]-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- (R)-N-[1-(3-cyclopropyl-1,2,4-oxadiazole-5-carbonyl)-propyl]-3-phenylmethanesulfonyl-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- {(R)-1-[1-(benzothiazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(S)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-thiophen-2-yl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[1-(benzothiazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;

- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- (R)-1-{1-[hydroxy-(3-phenyl-1,2,4-oxadiazol-5-yl)-methyl]-propylcarbamoyl}-2-phenylmethanesulfonyl-ethyl)-carbamic acid tert-butyl ester;
- ((R)-2-cyclopropylmethanesulfonyl-1-{(S)-1-[(5-ethyl-1,2,4-oxadiazol-3-yl)-hydroxy-methyl]-propylcarbamoyl}-ethyl)-carbamic acid tert-butyl ester;
- {(R)-1-[1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-3-phenyl-propylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(hydroxy-thiazol-2-yl-methyl)-3-phenyl-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- (R)-1-{1-[hydroxy-(3-phenyl-1,2,4-oxadiazol-5-yl)-methyl]-propylcarbamoyl}-2-phenylmethanesulfonyl-ethyl)-carbamic acid tert-butyl ester;
- ((R)-2-cyclopropylmethanesulfonyl-1-{(S)-1-[(5-ethyl-1,2,4-oxadiazol-3-yl)-hydroxy-methyl]-propylcarbamoyl}-ethyl)-carbamic acid tert-butyl ester;
- {(R)-1-[1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-3-phenyl-propylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(hydroxy-thiazol-2-yl-methyl)-3-phenyl-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- (R)-2-phenylmethanesulfonyl-1-{(S)-1-[(3-cyclopropyl-1,2,4-oxadiazol-5-yl)-hydroxy-methyl]-propylcarbamoyl}-ethyl)-carbamic acid tert-butyl ester;
- (R)-N-[1-(Benzoxazole-2-carbonyl)-butyl]-2-[cyclopropylmethyl-(tetrahydro-pyran-4-ylmethyl)-amino]-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;

- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-(1-methyl-piperidin-4-ylamino)-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-(bis-thiophen-2-ylmethyl-amino)-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;
- (S)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-(tetrahydro-pyran-4-ylamino)-3-thiophen-2-yl-propionamide;
- S)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-isopropylamino-3-thiophen-2-yl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-[(2-methoxy-ethyl)-(tetrahydro-pyran-4-yl)-amino]-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-cyclohexylamino-3-phenylmethanesulfonyl-propionamide;

- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;
- N-cyanomethyl-3-cyclohexyl-propionamide;
- N-cyanomethyl-3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionamide;
- 3-(3-cyclohexyl-propionylamino)-2-oxo-5-phenyl-pentanoic acid thiazol-2-ylamide;
- 3-cyclohexyl-*N*-(1-formyl-3-phenyl-propyl)-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-N-[(S)-1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-propionamide;
- *N*-[(S)-1-(benzooxazole-2-carbonyl)-propyl]-2-(2-cyano-phenylamino)-3-cyclohexyl-propionamide;
- N-Cyanomethyl-3-cyclohexyl-2-(4-methoxy-phenoxy)-propionamide;
- 2-benzyloxy-N-cyanomethyl-3-cyclohexyl-propionamide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-benzyloxy-3-phenylmethanesulfonyl-propionamide;
- (*R*)-*N*-[(*S*)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-methoxymethoxy-3-phenylmethanesulfonyl-propionamide;
- (S)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-hydroxy-3-phenyl-propionamide;
- (*R*)-*N*-[(*S*)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-3-phenylmethanesulfonyl-2-triisopropylsilanyloxy-propionamide;
- (*R*)-*N*-[(*S*)-1-(1-benzothiazol-2-yl-methanoyl)-propyl]-2-hydroxy-3-phenylmethanesulfonyl-propionamide;
- (*R*)-2-hydroxy-3-phenylmethanesulfonyl-*N*-[(S)-1-(1-pyridazin-3-yl-methanoyl)-butyl]-propionamide;
- (S)-3-((R)-2-hydroxy-3-phenylmethanesulfonyl-propanoylamino)-2-oxo-pentanoic acid benzylamide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide;

- (*R*)-*N*-[(*S*)-1-(1-benzothiazol-2-yl-methanoyl)-propyl]-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide; and
- (2R,5S)-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonylmethyl]-6-ethoxy-5-ethyl-morpholin-3-one; or[[and]] their corresponding N-oxides, and their prodrugs, and their protected derivatives, individual isomers and mixtures of isomers thereof; and the pharmaceutically acceptable salts and solvates (e.g. hydrates) of such compounds and their N-oxides and their prodrugs, and their protected derivatives, individual isomers and mixtures of isomers thereof.
- 15. (Original) A compound of claim 14 selected from the group consisting of: (*R*)-*N*-cyanomethyl-2-hydroxy-3-phenylmethanesulfonyl-propionamide;
- (R)-N-(1-cyano-1-thiophen-2-yl-methyl)-2-hydroxy-3-phenylmethanesulfonyl-propionamide;
- (*R*)-*N*-(1-cyano-1-thiophen-2-yl-methyl)-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide;
- (*R*)-*N*-cyanomethyl-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide;

morpholine-4-carboxylic acid (R)-1-(cyanomethyl-carbamoyl)-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (R)-1-(cyanomethyl-carbamoyl)-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester;

- (R)-(2-methoxy-ethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-phenylmethanesulfonyl-ethyl ester;
- (S)-diethyl-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-pyrrolidine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-morpholine-4-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-4-Ethyl-piperazine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-2-hydroxymethyl-pyrrolidine-1-carboxylic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-(2,2,2-Trifluoro-ethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;

- (S)-(2-hydroxyethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester; (Tetrahydrofuran-2-ylmethyl)-carbamic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-Azetidine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-cyclopropyl-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-piperidine-1-carboxylic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-(2-methoxy-ethyl)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (R)-3-hydroxy-pyrrolidine-1-carboxylic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-3-hydroxy-pyrrolidine-1-carboxylic acid (S)-1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (S)-morpholine-4-carboxylic acid 1-(cyanomethyl-carbamoyl)-3-cyclohexyl-propyl ester; morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester;

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzothiazol-2-yl-methanoyl)-propylcarbamoyl]-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester;

pyrrolidine-1-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

dimethyl-carbamic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzylcarbamoyl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (S)-1-[(S)-1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester; morpholine-4-carboxylic acid (S)-1-[(S)-1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

- (S)-2-{(R)-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propanoylamino}-*N*-methoxy-*N*-methyl-butyramide;
- (R)-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-N-((S)-1-formyl-propyl)-2-hydroxy-propionamide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-hydroxy-3-phenyl-methanesulfonyl-propionamide;
- (S)-3-{3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-propanoylamino}-2-oxo-pentanoic acid benzylamide;
- N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-propionamide;
- N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-3-phenyl-propyl]-3-p-tolylmethanesulfonyl-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-(1-ethyl-2,3-dioxo-3-pyrrolidin-1-yl-propyl)-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-(1-ethyl-3-morpholin-4-yl-2,3-dioxo-propyl)-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-(1-ethyl-2,3-dioxo-3-piperazin-1-yl-propyl)-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-[3-(1,1-dioxo-1l6-thiomorpholin-4-yl)-1-ethyl-2,3-dioxo-propyl]-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-[1-ethyl-3-(4-methyl-sulfonyl-piperazin-1-yl)-2,3-dioxo-propyl]-propionamide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid dimethylamide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid cyclopentyl-ethyl-amide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid phenylamide;

- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid pyridin-3-ylamide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid (tetrahydro-pyran-4-yl)-amide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid (1-benzoyl-piperidin-4-yl)-amide;
- 3-[3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionylamino]-2-oxo-pentanoic acid (2-morpholin-4-yl-ethyl)-amide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-(2-nitro-phenylamino)-3-phenylmethanesulfonyl-propionamide;
- N-[1-(benzooxazole-2-carbonyl)-propyl]-3-phenylmethanesulfonyl-2-(pyrimidin-2-ylamino)-propionamide.
- (R)-*N*-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-(5-nitro-thiazol-2-ylamino)-3-phenylmethanesulfonyl-propionamide;
- (2S) (4,4-difluoro-2-hydroxy-5-phenyl-pentanoic acid (1(S)-cyano-3-phenyl-propyl)-amide;
- N-(1(S)-cyano-3-phenyl-propyl)-2-(S)-(2-morpholin-4-yl-2-oxo-ethoxy)-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2-(S)-fluoro-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2,2-difluoro-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2-(S)-hydroxy-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2-(R)-hydroxy-4-phenyl-butyramide;
- N-(1-(S)-cyano-3-phenyl-propyl)-2-(R)-methoxy-4-phenyl-butyramide;
- 2,2-difluoro-5-phenyl-pentanoic acid (1-cyano-cyclopropyl)-amide;
- N-(1-(S)-cyano-3-phenyl-propyl)-4-phenyl-butyramide;
- 2,2-difluoro-5-phenyl-pentanoic acid ((S)-1-cyano-3-phenyl-propyl)-amide;
- N-(4-cyano-1-ethyl-piperidin-4-yl)-3-cyclohexyl-propionamide;
- N-(4-cyano-1-ethyl-piperidin-4-yl)-3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionamide;
- (S)-tert-butyl-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (R)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-(2-difluoromethoxy-phenylmethanesulfonyl)-ethyl ester;

- (S)-carbamic acid 1-(cyanomethyl-carbamoyl)-2-cyclohexyl-ethyl ester;
- (R)-morpholine-4-carboxylic acid 1-(1-cyano-cyclopropylcarbamoyl)-2-phenylmethanesulfonylethyl ester;
- (R)-morpholine-4-carboxylic acid 1-(4-cyano-tetrahydro-pyran-4-ylcarbamoyl)-2-phenylmethanesulfonyl-ethyl ester;
- 3-cyclohexyl-2-hydroxy-N-[1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propyl]-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-(1-methyl-piperidin-4-ylamino)-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-(bis-thiophen-2-ylmethyl-amino)-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;
- (S)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-(tetrahydro-pyran-4-ylamino)-3-thiophen-2-yl-propionamide;
- (S)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-isopropylamino-3-thiophen-2-yl-propionamide;
- (R)-N-[1-(benzothiazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;

- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-[(2-methoxy-ethyl)-(tetrahydro-pyran-4-yl)-amino]-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-cyclohexylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;
- (1S)-N-[1-(benzooxazole-2-carbonyl)-butyl]-2-(S)-fluoro-4-phenyl-butyramide;
- 2,2-difluoro-5-phenyl-pentanoic acid [(S)-1-(benzoxazole-2-carbonyl)-butyl]-amide; morpholine-4-carboxylic acid (S)-1-[(S)-1-(benzooxazole-2-carbonyl)-propylcarbamoyl]-2-cyclohexyl-ethyl ester;
- morpholine-4-carboxylic acid (S)-2-cyclohexyl-1-[(S)-1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propylcarbamoyl]-ethyl ester;
- morpholine-4-carboxylic acid (S)-2-cyclohexyl-1-[(S)-1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-propylcarbamoyl]-ethyl ester;
- morpholine-4-carboxylic acid (S)-2-cyclohexyl-1-[(S)-1-(5-phenyl-[1,3,4]oxadiazole-2-carbonyl)-propylcarbamoyl]-ethyl ester;
- morpholine-4-carboxylic acid (S)-1-[(S)-1-(benzooxazole-2-carbonyl)-propylcarbamoyl]-3-cyclohexyl-propyl ester;
- 4-[4,4-dimethyl-2-(morpholine-4-carbonyloxy)-pentanoylamino]-3-oxo-azepane-1-carboxylic acid benzyl ester;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-3-cyclopropylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[1-(benzoxazole-2-carbonyl)-butyl]-2-cyclohexylamino-3-cyclopropylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzoxazole-2-carbonyl)-butyl]-2-cycloheptylamino-3-cyclopropylmethanesulfonyl-propionamide;
- (R)-3-phenylmethanesulfonyl-N-[(S)-3-phenyl-1-(thiazole-2-carbonyl)-propyl]-2-(tetrahydropyran-4-ylamino)-propionamide;

- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-3-phenyl-propyl]-3-cyclopropylmethanesulfonyl-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- (R)-3-cyclopropylmethanesulfonyl-N-[1-(5-ethyl-1,2,4-oxadiazole-3-carbonyl)-propyl]-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- (R)-3-phenylmethanesulfonyl-N-[1-(3-phenyl-1,2,4-oxadiazole-5-carbonyl)-propyl]-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- (R)-N-[1-(3-cyclopropyl-1,2,4-oxadiazole-5-carbonyl)-propyl]-3-phenylmethanesulfonyl-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- {(R)-1-[1-(benzothiazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(S)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-thiophen-2-yl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[1-(benzothiazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- (R)-1-{1-[hydroxy-(3-phenyl-1,2,4-oxadiazol-5-yl)-methyl]-propylcarbamoyl}-2-phenylmethanesulfonyl-ethyl)-carbamic acid tert-butyl ester;
- ((R)-2-cyclopropylmethanesulfonyl-1-{(S)-1-[(5-ethyl-1,2,4-oxadiazol-3-yl)-hydroxy-methyl]-propylcarbamoyl}-ethyl)-carbamic acid tert-butyl ester;
- {(R)-1-[1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-3-phenyl-propylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- {(R)-1-[(S)-1-(hydroxy-thiazol-2-yl-methyl)-3-phenyl-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;

- {(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- (R)-1-{1-[hydroxy-(3-phenyl-1,2,4-oxadiazol-5-yl)-methyl]-propylcarbamoyl}-2-phenylmethanesulfonyl-ethyl)-carbamic acid tert-butyl ester;
- ((R)-2-cyclopropylmethanesulfonyl-1-{(S)-1-[(5-ethyl-1,2,4-oxadiazol-3-yl)-hydroxy-methyl]-propylcarbamoyl}-ethyl)-carbamic acid tert-butyl ester;
- {(R)-1-[1-(benzoxazol-2-yl-hydroxy-methyl)-butylcarbamoyl]-2-phenylmethanesulfonyl-ethyl}-carbamic acid tert-butyl ester;
- $\label{eq:continuous} $$ \{(R)-1-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-3-phenyl-propylcarbamoyl]-2-cyclopropylmethanesulfonyl-ethyl\}-carbamic acid tert-butyl ester;$
- $\{(R)-1-[(S)-1-(hydroxy-thiazol-2-yl-methyl)-3-phenyl-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl\}-carbamic acid tert-butyl ester;$
- (R)-2-phenylmethanesulfonyl-1-{(S)-1-[(3-cyclopropyl-1,2,4-oxadiazol-5-yl)-hydroxy-methyl]-propylcarbamoyl}-ethyl)-carbamic acid tert-butyl ester;
- (R)-N-[1-(Benzoxazole-2-carbonyl)-butyl]-2-[cyclopropylmethyl-(tetrahydro-pyran-4-ylmethyl)-amino]-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-(1-methyl-piperidin-4-ylamino)-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-(bis-thiophen-2-ylmethyl-amino)-3-phenylmethanesulfonyl-propionamide;

- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-dibenzylamino-3-phenylmethanesulfonyl-propionamide;
- (S)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-(tetrahydro-pyran-4-ylamino)-3-thiophen-2-yl-propionamide;
- S)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-isopropylamino-3-thiophen-2-yl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[1-(benzothiazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydropyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-[(2-methoxy-ethyl)-(tetrahydro-pyran-4-yl)-amino]-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-cyclohexylamino-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazol-2-yl-hydroxy-methyl)-butyl]-2-dimethylamino-3-phenylmethanesulfonyl-propionamide;

N-cyanomethyl-3-cyclohexyl-propionamide;

N-cyanomethyl-3-(2-difluoromethoxy-phenylmethanesulfonyl)-propionamide;

- 3-(3-cyclohexyl-propionylamino)-2-oxo-5-phenyl-pentanoic acid thiazol-2-ylamide;
- 3-cyclohexyl-*N*-(1-formyl-3-phenyl-propyl)-propionamide;
- 3-(2-difluoromethoxy-phenylmethanesulfonyl)-*N*-[(S)-1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-propyl]-propionamide;
- *N*-[(S)-1-(benzooxazole-2-carbonyl)-propyl]-2-(2-cyano-phenylamino)-3-cyclohexyl-propionamide;
- N-Cyanomethyl-3-cyclohexyl-2-(4-methoxy-phenoxy)-propionamide;
- 2-benzyloxy-N-cyanomethyl-3-cyclohexyl-propionamide;

- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-benzyloxy-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-methoxymethoxy-3-phenylmethanesulfonyl-propionamide;
- (S)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-hydroxy-3-phenyl-propionamide;
- (*R*)-*N*-[(*S*)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-3-phenylmethanesulfonyl-2-triisopropylsilanyloxy-propionamide;
- (*R*)-*N*-[(*S*)-1-(1-benzothiazol-2-yl-methanoyl)-propyl]-2-hydroxy-3-phenylmethanesulfonyl-propionamide;
- (*R*)-2-hydroxy-3-phenylmethanesulfonyl-*N*-[(S)-1-(1-pyridazin-3-yl-methanoyl)-butyl]-propionamide;
- (S)-3-((R)-2-hydroxy-3-phenylmethanesulfonyl-propanoylamino)-2-oxo-pentanoic acid benzylamide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide;
- (R)-N-[(S)-1-(1-benzothiazol-2-yl-methanoyl)-propyl]-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide; and
- (2R,5S)-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonylmethyl]-6-ethoxy-5-ethylmorpholin-3-one.
- 16. (Currently Amended) A compound of claim 15 selected from the group consisting of: morpholine-4-carboxylic acid (R)-1-(cyanomethyl-carbamoyl)-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester, (Compound 31); morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester, (Compound 11); morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester, (Compound 14);

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzothiazol-2-yl-methanoyl)-propylcarbamoyl]-2-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-ethyl ester, (Compound 15);

pyrrolidine-1-carboxylic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester, (Compound 19);

dimethyl-carbamic acid (R)-1-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester, (Compound 20);

morpholine-4-carboxylic acid (R)-1-[(S)-1-(1-benzylcarbamoyl-methanoyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester, (Compound 25);

morpholine-4-carboxylic acid (S)-1-[(S)-1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

morpholine-4-carboxylic acid (S)-1-[(S)-1-(5-ethyl-[1,3,4]oxadiazole-2-carbonyl)-propylcarbamoyl]-2-phenylmethanesulfonyl-ethyl ester;

- (R)-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-N-((S)-1-formyl-propyl)-2-hydroxy-propionamide;
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-hydroxy-3-phenyl-methanesulfonyl-propionamide;
- (S)-3-{3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-propanoylamino}-2-oxo-pentanoic acid benzylamide;
- (R)-*N*-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-2-(2-nitro-phenylamino)-3-phenylmethanesulfonyl-propionamide;
- (R)-*N*-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-butyl]-2-(5-nitro-thiazol-2-ylamino)-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-3-phenylmethanesulfonyl-2-(tetrahydro-pyran-4-ylamino)-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-isopropylamino-3-phenylmethanesulfonyl propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-[(2-methoxy-ethyl)-(tetrahydro-pyran-4-yl)-amino]-3-phenylmethanesulfonyl-propionamide;
- (R)-N-[(S)-1-(benzoxazole-2-carbonyl)-butyl]-2-cyclohexylamino-3-phenylmethanesulfonyl-propionamide;

morpholine-4-carboxylic acid (S)-2-cyclohexyl-1-[(S)-1-(oxazolo[4,5-b]pyridine-2-carbonyl)-propylcarbamoyl]-ethyl ester;

- (S)-3-((R)-2-hydroxy-3-phenylmethanesulfonyl-propanoylamino)-2-oxo-pentanoic acid benzylamide; and
- (R)-N-[(S)-1-(1-benzooxazol-2-yl-methanoyl)-propyl]-3-[2-(1,1-difluoro-methoxy)-phenylmethanesulfonyl]-2-hydroxy-propionamide.
- 17. (Original) A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 1 in combination with a pharmaceutically acceptable excipient.
- 18. (Original) A pharmaceutical composition comprising a therapeutically effective amount of a compound of Claim 2 in combination with a pharmaceutically acceptable excipient.
- 19. (Withdrawn) A method for treating a disease in an animal in which inhibition of Cathepsin S can prevent, inhibit or ameliorate the pathology and/or symptomology of the disease, which method comprises administering to the animal a therapeutically effective amount of compound of Claim 1 or Claim 2.
- 20. (Withdrawn) The use of a compound of Claim 1 or 2 in the manufacture of a medicament for treating a disease in an animal in which Cathepsin S activity contributes to the pathology and/or symptomology of the disease.